All City Council Meetings are recorded.

CITY OF CUSTER CITY
COUNCIL AGENDA
November 7th, 2016 – City Hall Council Chambers
5:30 P.M.

1. Call to Order - Roll Call - Pledge of Allegiance

2. Approval of Agenda

3. Approval of Minutes – October 17th, 2016 Minutes

4. Declaration of Conflict of Interest

5. Department Head Discussion
   - Public Works Director – General Discussion
   - Planning Administrator – General Discussion
   - Finance Officer – General Discussion
6. Public Presentations - Public Hearings
   - a. Public Hearing – Malt Beverage License Transfer & New Wine License– Calamity Jane Winery
   - b. Public Hearing – Liquor & Wine License Renewals
   - c. Vacation Home Rental Survey
   - d. Second Reading – Ordinance #778 – Water Rates
   - e. Second Reading – Ordinance #779 – Wastewater Rates
   - f. Second Reading – Ordinance #780 – Service Reduction Rates
   - g. Second Reading – Ordinance #781 – 2016 Supplemental Appropriation
   - h. Resolution #11-07-16A – Personnel Manual – Public Works Department Working Foreman Position Description
   - i. Resolution #11-07-16B – Adopting West Dam Emergency Action Plan
7. Old Business
   - a.
   - b.
8. New Business
   - a. Deer Count
   - b. Employee Step Increase
   - c. Employee Job Title Change
   - d.
9. Presentation of Claims –
10. Committee Reports –
11. Executive Session – Personnel, Proposed Litigation, & Contract Negotiations (SDCL 1-25-2(1-4))
12. Adjournment

REMINDERS

General Government Committee Meeting – November 14th, 2016 4:00 P.M.

Planning Commission Meeting – November 14th, 2016 7:00 P.M.

Regular City Council Meeting – November 21st, 2016 5:30 P.M.

Park & Recreation Committee Meeting – November 22nd, 2016 5:30 P.M.

Public Works Committee Meeting – November 28th, 2016 5:00 P.M.

Regular City Council Meeting – December 5th, 2016 5:30 P.M.

ADA Compliance: The City of Custer City fully subscribes to the provisions of the Americans with Disabilities Act. If you desire to attend this public meeting and are in need of special accommodations, please notify the Finance Office 24 hours prior to the meeting so that appropriate services are available. This institution is an equal opportunity provider.

CITY OF CUSTER CITY
COUNCIL PROCEEDINGS- REGULAR SESSION
October 17th, 2016

Mayor Jared Carson called to order the second meeting of the Common Council for the month of October, 2016 at 5:30 p.m. Present at roll call were Councilpersons Maciejewski, Heinrich, Nielsen, Fischer, Blom and Schleining. City Attorney Chris Beesley was also present. The Pledge of Allegiance was stated.

AGENDA

Councilperson Fischer moved, with a second by Councilperson Blom, to approve the agenda. The motion unanimously carried.

MINUTES

Councilperson Nielsen moved, with a second by Councilperson Blom, to approve the minutes from the October 3rd regular council meeting. The motion unanimously carried.

CONFLICTS OF INTEREST

Councilperson Heinrich stated he would have a conflict of interest with the Vacation Home Rental Survey. No other conflicts of interest were stated.

DEPARTMENT HEAD DISCUSSION

Bob Morrison, Public Works Director, mentioned that the City will have an opportunity to present the Eleventh Street bridge and pedestrian walkway project in Pierre as the next step in the TAP grant application process. Bob is also working on reapplying for Tree City USA and mentioned that year to date the City has spent approximately $6.50 per capita for trees. The minimum requirement for Tree City USA is $2 per capita and in 2015 the City spent $9 per capita on trees. Bob also mentioned that the Custer Community Center fire rating project construction should be starting this week.

Laurie Woodward, Finance Officer, mentioned that if Council has questions on the law enforcement spreadsheets and financial spreadsheets to let her know.

PUBLIC HEARING – MALT BEVERAGE LICENSE TRANSFER – CUSTERWOLF LLC

Councilperson Schleining moved to approve the retail on-off sale malt beverage license transfer for Custerwolf LLC, contingent upon proof of insurance being provided. Seconded by Councilperson Nielsen, the motion unanimously carried.

VACATION HOME RENTAL SURVEY

After some discussion on conflict of interest with this matter, Councilperson Heinrich stated he didn't feel he had a conflict with the information gathering for the vacation home rentals. Councilperson Nielsen moved to table the vacation home rental survey until the November 7th Council Meeting. Seconded by Councilperson Blom, the motion unanimously carried.

EXECUTIVE PROCLAMATION – WORLD POLIO DAY

Councilperson Nielsen moved to approve the Executive Proclamation for World Polio Day. Seconded by Councilperson Schleining, the motion unanimously carried.

Executive Proclamation
State of South Dakota
City of Custer City
Office of the Mayor

WHEREAS, Rotary International, founded on February 23, 1905, in Chicago, Illinois USA, is the world's first and one of the largest non-profit humanitarian service organizations; and

WHEREAS, Rotary in 1985 launched Polio Plus and spearheaded efforts with the World Health Organization, U.S. Centers for Disease Control and Prevention, and UNICEF to immunize the children of the world against polio; and

WHEREAS, polio cases have dropped by 99.9 percent since 1988 the world stands on the threshold of eradicating the disease; and

WHEREAS, to date, Rotary has contributed more than $1.3 billion and countless volunteer hours to the protection of more than two one half billion children against polio in 122 countries; and

WHEREAS, since 2012, Rotary raised $228 million in new money for polio eradication in response to a $355 million challenge grant from the Bill & Melinda Gates Foundation, which promptly contributed an additional $50 million in recognition of Rotary's commitment; and

WHEREAS, these efforts are providing much needed operational support, medical personnel, laboratory equipment and educational materials for health workers and parents; and

WHEREAS, there are 3 Rotary Clubs within Rapid City SD actively sponsoring service projects that address such critical issues as poverty, health, hunger, illiteracy, and the environment in Rapid City, the state of South Dakota and abroad.

Now, therefore, I, Jared Carson, Mayor of the City of Custer City, do hereby proclaim, Monday, October 24, 2016 as World Polio Day in Custer City, South Dakota, and encourage all citizens to join me in recognizing Rotary International for its 31 years of fighting Polio and in recognizing as well the Rotary Clubs of Rapid City, South Dakota, USA.

In witness whereof, I have hereunto set my hand and caused the Seal of the City of Custer City to be affixed this Seventeenth day of October in the year of our Lord Two Thousand and Sixteen.

CITY OF CUSTER CITY
S/Jared Carson, Mayor
ATTEST: Laurie Woodward, Finance Officer

FIRST READING – ORDINANCE #778 – WATER RATES

Councilperson Fischer moved to approve the first reading of Ordinance #778, Water Rates. Seconded by Councilperson Schleining, the motion unanimously carried.

FIRST READING – ORDINANCE #779 – WASTEWATER RATES

Councilperson Schleining moved to approve the first reading of Ordinance #779, Wastewater Rates. Seconded by Councilperson Nielsen, the motion unanimously carried.

FIRST READING – ORDINANCE #780 – SERVICE REDUCTION RATES

Councilperson Nielsen moved to approve the first reading of Ordinance #780, Service Reduction Rates. Seconded by Councilperson Schleining, the motion unanimously carried.

FIRST READING – ORDINANCE #781 – 2016 SUPPLEMENTAL APPROPRIATION

Councilperson Maciejewski moved to approve the first reading of Ordinance #781, 2016 Supplemental Appropriation. Seconded by Councilperson Fischer, the motion unanimously carried.

2017 CUSTER AREA CHAMBER BUSINESS & MEMBERSHIP DIRECTORY

Charlie Najacht and Kate Najacht with the Custer Chronicle spoke to Council about having a bigger presence in the 2017 Custer Area Chamber Business & Membership Directory. Councilperson Nielsen moved to approve increasing the 2017 Custer Area Chamber of Commerce Business and Membership Directory ad from a quarter page (previously approved) to half page for $695 plus an additional $25 for the ad to be used digitally as well. Seconded by Councilperson Schleining, the motion carried with Councilperson Heinrich, Nielsen, Fischer, Blom and Schleining voting yes while Councilperson Maciejewski voted no.

2017 ANIMAL CONTROL CONTRACT

Councilperson Heinrich moved to approve 2017 Animal Control Contract with Battle Mountain Humane Society for $800 per month. Seconded by Councilperson Nielsen, the motion unanimously carried.

CLAIMS

Councilperson Schleining moved, with a second by Councilperson Blom, to approve the following claims. The motion unanimously carried.

Black Hills Power, Utilities, $11,409.90
Chris Supply, Repair & Maintenance, $45.80
John Cotner, Reimbursement, $89.30
Culligan, Repair & Maintenance, $18.50
Custer Clinic, Safety, $89.00
Custer County Auditor, Rental, $30.00
Chamber of Commerce, Sales Tax Subsidy, $28,690.75
Custer True Value, Supplies, Repair & Maintenance, $787.15
Dakota Pump INC, Pump Repair & Maintenance, $2,764.96
French Creek Supply, Supplies, $367.06
Goldenwest Technologies, Professional Fees, $620.50
Green Owl Media, Advertising, Professional Fees, $270.00
Highmark Federal Credit Union, CD, $150,000.00
Hill Materials, Refund, $167.10
Hill Materials, Gravel, $735.50
ICC, Supplies, $41.90
JP Cooke Co, Supplies, $59.75
Jenner Equipment, Rental, Repair & Maintenance, $1,510.99

Midcontinent Testing Labs, Professional Fees, $459.00
NASASP, Membership, $39.00
Petty Cash, Travel, $63.00
Quality Weed Control Plus, Repair & Maintenance, $2,758.27
Rapid Delivery, Professional Fees, $54.63
Regional Health Network, Sales Tax Subsidy, $234,733.66
S &B Motors, Supplies, $107.88
SRF Loan Payments, $15,477.11
Sanders Sanitation, Garbage Collection Contract, $13,136.63
Servall, Repair & Maintenance, $236.76
SD Dept of Revenue, License Transfer, $75.00
Executive MGMT Finance Office, Utilities, $13.29
SD One Call, Supplies, $110.25
USDA Loan Payments, $8,910.00
Unemployment Insurance Division of SD, $72.34
United Way, Contributions, $99.00
US Department of Treasury, Deductions, $142.55
Vernon Manufacturing, Repair & Maintenance, $327.50
Wright Express, Supplies, $1,037.12
Tim Wollaston, Reimbursement, $149.99
YMCA, Contributions & Memberships, $226.00
Jamie Dean, Utility Deposit Refund, $15.04
Total Claims $475,942.18

COMMITTEE REPORTS

Various committee reports were given.

EXECUTIVE SESSION

Councilperson Schleining moved to go into and out of executive session for personnel per SDCL 1-25-2(1-4) at 6:27 pm, with the Attorney, Public Works Director and Finance Officer present. Seconded by Councilperson Fischer, the motion unanimously carried. Council came out of executive session at 6:30 pm, with no action taken.

ADJOURNMENT

With no further business, Councilperson Blom moved to adjourn the meeting at 6:30 p.m. Seconded by Councilperson Nielsen, the motion carried unanimously.

ATTEST: CITY OF CUSTER CITY

Laurie Woodward
Finance Officer

Jared Carson
Mayor

ESTABLISHMENT	LICENSE	TAXES PAID	AGREEMENT	INSURANCE	10% DUE TO CITY	VIDEO LOTTERY
CALAMITY JANE WINERY - Wine (on/off)	NEW	YES	10/2018			
CALAMITY JANE WINERY - Malt Bev	TRANSFER	YES	10/2018			

512 Mt. Rushmore Rd

#50 Farm Wine (on-off)

will be provided prior to Jan. 1, 2017

* Fingerprints paid for / machine down at Sheriff's office
* will have completed by 1st of year

ESTABLISHMENT	LICENSE	TAXES PAID	AGREEMENT	INSURANCE	10% DUE TO CITY	VIDEO LOTTERY
AJ'S	RW-19875	YES	10/2018	03/2017		
BEGGIN BURRO	RW-21629	YES	10/2018	6/2017		
BH BURGER AND BUN	RW-20218	YES	10/2018	10/2017		
BUGLIN BULL	RL-5523	YES	10/2018	06/2017		
BUGLIN BULL	RW-19355	YES	10/2018	06/2017		
CALAMITY JANE WINERY	NEW	YES	10/2018	PENDING		
CALAMITY JANE WINERY	TRANSFER	YES	10/2018	PENDING		
CAPTAINS TABLE	RL-5525	YES	10/2018	04/2017		
CUSTER HOSPITALITY	CL-22694	YES	12/2017	PENDING		
CUSTERWOLF, LLC	TRANSFER	YES	10/2018	11/2017		
FRESH START	RW-19299	YES	11/2018	11/2016		
FRESH START - CASINO	RW-19300	YES	11/2018	11/2016		
FRESH START	PL-21056	YES	11/2018	11/2016		
FRONTIER BAR	RL-5528	YES	10/2018	05/2017		
GOLD PAN SALOON	RL-5524	YES	02/2018	PENDING		
LYNN'S DAKOTAMART	PL-4487	YES	10/2018	3/2017		
ROCKY KNOLLS GOLF COURSE	RL-5996	NA	10/2018	1/2017		
SAGACIOUS INC DBA CUSTER CO	RW-23051	YES	3/2018	6/2017		
SAGE CREEK GRILLE	RW-6426	YES	10/2018	4/2017		
SHOPKO	RW-20961	YES	10/2018	11/2016		
VFW	RL-6292	YES	11/2018	01/2017		$ 350.00

Contigent upon proof of insurance being provided and all payments due to the city being paid current.

Dear Neighbor,
As part of our larger review of zoning ordinances, the City of Custer would like some input on the impact of vacation rental homes in our community. Please take a few minutes to answer the questions below.

1. Are there any vacation rental homes in your neighborhood?

- ☐ Yes
- ☐ No
- ☐ Don't know

2. **If yes,** please share your impressions below.

_____

_____

_____

_____

_____

_____

_____

Please return this questionare to the city office, either in person, through the mail or electronically. Thank you for your time and input.

Custer City Council
622 Crook St
Custer, SD 57730

mayor@cityofcuster.com

ORDINANCE NO. 778

An Ordinance entitled An Ordinance Amending Title 13 Public Services, Chapter 13.08. Section 13.08.010 A & B of the City of Custer City Municipal Code and amending, replacing, and superseding all prior ordinances or amendments, by which amending and superseding said Ordinance as follows, to wit:

13.08.010 Rates and charges.

There shall be charged by the city, effective for the January 2017 billing upon passage and publication of the ordinance codified in this chapter as provided by law, a charge for water services (operation and maintenance) to persons, associations of individuals, partnerships, corporations or firms based upon the usage of water. The rates shall be as follows:

A. 1. Operation and Maintenance—Residential (Single Family).

Gallons Used	Water Charge
2,000 (minimum)	$9.51

On amounts of water used over two thousand (2,000) gallons, add six dollars and seventy cents ($6.70) per thousand gallons used to the water charge.

B. 1. Operation and Maintenance—Commercial and Multi Family.

Gallons Used	Water Charge
2,000 (minimum)	$21.48

On amounts of water used over two thousand (2,000) gallons, add seven dollars and ninty-eight cents ($7.98) per thousand gallons used to the water charge.

NOW BE IT ORDAINED that all ordinances or parts thereof in conflict with this ordinance are hereby repealed. Should any section or part of this ordinance be determined to be invalid, the same shall not invalidate the remaining section(s) of this Ordinance.

Dated this 7th day of November, 2016

City of Custer City

Attest _____ _____

Laurie Woodward, Finance Officer Jared Carson, Mayor

(SEAL)

First Reading: October 17th, 2016
Seconding Reading: November 7th, 2016
Publication: November 16th, 2016

Vote:
Schleining: Fischer:
Heinrich: Blom:
Nielsen: Maciejewski:

ORDINANCE NO. 779

An Ordinance entitled An Ordinance Amending Title 13 Public Services, Chapter 13.20. Section 13.20.130 of the City of Custer City Municipal Code and amending, replacing, and superseding all prior ordinances or amendments, by which amending and superseding said Ordinance as follows, to wit:

BE IT ORDAINED by the Common Council of the City of Custer City that section 13.20.130 be amended as follows:

13.20.130 Rates and charges.

There shall be charged by the city, effective for the January 2017 billing upon passage and publication of the ordinance codified in this chapter as provided by law, a charge for wastewater services (operation and maintenance) to persons, associations of individuals, partnerships, corporations or firms based upon the usage of water. The rates shall be as follows:

A. 1. Operation and Maintenance—Residential (Single Family).

Gallons Used	Wastewater Charge
2,000 (minimum)	$20.55

On amounts of water used over two thousand (2,000) gallons, add two dollar and twenty-six cents ($2.26) per thousand gallons used to the wastewater charge.

B. 1. Operation and Maintenance—Commercial and Multi Family.

Gallons Used	Wastewater Charge
2,000 (minimum)	$24.13

On amounts of water used over two thousand (2,000) gallons, add six dollars and fifty-two cents ($6.52) per thousand gallons used to the wastewater charge.

C. In addition to the charge for wastewater services (operation and maintenance) to persons, associations of individuals, partnerships, corporations or firms, there shall be a surcharge for the services of the facilities financed.

1. Bond Redemption – 2012 SRF. The following surcharge is imposed pursuant to SDCL 9-40-15 to pay, redeem and discharge the 2012 SRF Loan in the amount of nine hundred twenty-five thousand nine hundred and nineteen dollars ($925,919.00) until such loan is paid full. This charge shall be charged by the city, commencing with the June 2016 billing upon passage and publication of the ordinance codified in this chapter as provided by law.

	Monthly Fee Charged
Residential (Single-family), Commercial, and Multifamily	$5.50

NOW BE IT ORDAINED that all ordinances or parts thereof in conflict with this ordinance are hereby repealed. Should any section or part of this ordinance be determined to be invalid, the same shall not invalidate the remaining section(s) of this Ordinance.

Dated this 7th day of November, 2016

City of Custer City

Attest _____
Laurie Woodward, Finance Officer

_____
Jared Carson, Mayor

(SEAL)

First Reading: October 17th, 2016
Seconding Reading: November 7th, 2016
Publication: November 16th, 2016

Vote:
Schleining:
Heinrich:
Nielsen:
Fischer:
Bloom:
Maciejewski:

ORDINANCE NO. 780

AN ORDINANCE ENTITLED AN ORDINANCE AMENDING TITLE 13 PUBLIC SERVICES CHAPTER 13.24 WATER AND SEWER RATE CLASSIFICATIONS SECTION 13.24.060 SERVICE REDUCTION OF THE CITY OF CUSTER CITY MUNICIPAL CODE AND AMENDING, REPLACING, AND SUPERSEDING ALL PRIOR ORDINANCES OR AMENDMENTS, BY WHICH AMENDING AND SUPERSEDING SAID ORDINANCE AS FOLLOWS, TO WIT:

13.24.60 Service Reduction

All residential and commercial customers whose home is not occupied for a period of thirty (30) consecutive days or more shall present a written request for water shut-off in order to have their water and wastewater bill reduced during said period. In order to reinstate water and wastewater service, the customer shall present a written request therefore, at which time the rate reduction will terminate. The following reduced rates will apply for residential customers: water charge – six dollars and thirty-three cents ($6.33); bond charge – two dollars and sixty cents ($2.60); wastewater charge - six dollars and ninety cents ($6.90). The following reduced rates will apply for commercial customers: water charge – seven dollars and sixty cents ($7.60); bond charge – two dollars and sixty cents ($2.60); wastewater charge - nine dollars and twenty-one cents ($9.21).

NOW BE IT ORDAINED that all ordinances or parts thereof in conflict with this ordinance are hereby repealed. Should any section or part of this ordinance be determined to be invalid, the same shall not invalidate the remaining section(s) of this Ordinance.

Dated this 7th day of November, 2016

City of Custer City

_____

Jared Carson, Mayor

Attest _____

Laurie Woodward, Finance Officer

(SEAL)

First Reading: October 17, 2016

Seconding Reading: November 7, 2016

Publication: November 16, 2016

Vote:

Schleining:	Fischer:
Heinrich:	Blom:
Maciejewski:	Nielsen:

2017 UTILITY RATES - 2000 GALLON BASE

Single Family	1000 Gallons	2000 Gallons	3000 Gallons	4000 Gallons	5000 Gallons	6000 Gallons	7000 Gallons	8000 Gallons	9000 Gallons	10000 Gallons	
Water	9.51	9.51	16.20	22.90	29.59	36.29	42.98	49.68	56.37	63.07	6.70
Water Bond	4.75	4.75	6.95	9.15	11.35	13.55	15.75	17.95	20.15	22.35	2.20
Wastewater	20.55	20.55	22.80	25.06	27.32	29.57	31.83	34.08	36.34	38.59	2.26
Sewer Bond	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
Garbage	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	
Garbage Tax	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	
Total Residential Rate	60.16	60.16	71.31	82.46	93.61	104.76	115.91	127.06	138.21	149.36	

Commercial & Multi Family	1000 Gallons	2000 Gallons	3000 Gallons	4000 Gallons	5000 Gallons	6000 Gallons	7000 Gallons	8000 Gallons	9000 Gallons	10000 Gallons	20000 Gallons		100000 Gallons	200000 Gallons
Water	21.48	21.48	29.46	37.44	45.42	53.41	61.39	69.37	77.35	85.34	165.16	7.98	803.76	1602.01
Water Bond	4.75	4.75	6.95	9.15	11.35	13.55	15.75	17.95	20.15	22.35	44.35	2.20	220.35	440.35
Wastewater	24.13	24.13	30.65	37.17	43.69	50.21	56.73	63.25	69.77	76.29	141.49	6.52	663.08	1315.07
Sewer Bond	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00		5.00	5.00
Total Commercial Rate	55.36	55.36	72.06	88.76	105.47	122.17	138.87	155.57	172.28	188.98	356.00		1692.19	3362.43

2017 UTILITY RATES INCREASE

Single Family	1000 Gallons	2000 Gallons	3000 Gallons	4000 Gallons	5000 Gallons	6000 Gallons	7000 Gallons	8000 Gallons	9000 Gallons	10000 Gallons	
Water	0.28	0.28	0.47	0.67	0.86	1.06	1.25	1.45	1.64	1.84	0.20
Water Bond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wastewater	0.60	0.60	0.66	0.73	0.80	0.86	0.93	0.99	1.06	1.12	0.07
Sewer Bond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Garbage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Garbage Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Residential Rate	0.88	0.88	1.14	1.40	1.66	1.92	2.18	2.44	2.70	2.96	
	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	

Commercial & Multi Family	1000 Gallons	2000 Gallons	3000 Gallons	4000 Gallons	5000 Gallons	6000 Gallons	7000 Gallons	8000 Gallons	9000 Gallons	10000 Gallons	20000 Gallons		100000 Gallons	200000 Gallons
Water	0.63	0.63	0.86	1.09	1.32	1.56	1.79	2.02	2.25	2.49	4.81	0.23	23.41	46.66
Water Bond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wastewater	0.70	0.70	0.89	1.08	1.27	1.46	1.65	1.84	2.03	2.22	4.12	0.19	19.31	38.30
Sewer Bond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Total Commercial Rate	1.33	1.33	1.75	2.17	2.60	3.02	3.44	3.86	4.29	4.71	8.93		42.72	84.96
	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%		3%	3%

ORDINANCE NO. 781
SUPPLEMENTAL APPROPRIATION

An Ordinance Entitled Ordinance No. 781, a Supplemental Appropriation for the City of Custer City, South Dakota, for the Fiscal Year 2016.

WHEREAS, the budget adoption process was already completed when the additional budget items were implemented, it is necessary to make, approve, and adopt a supplemental appropriation ordinance for the fiscal year commencing January 1, 2016, to supplement certain funds established by the Appropriation Ordinance No. 765 for the fiscal year 2016:

THEREFORE, BE IT ORDAINED by the Common Council of the City of Custer City:

SECTION I: That in addition to the sums of money appropriated by said Appropriation Ordinance No. 765, the following sums shall be appropriated, to-wit:

FUNDS DERIVED FROM GENERAL FUND:	
Reserve Funds	$67,175
State Grant Revenue	$10,000
WATER FUND:	
Reserve Funds	$2,600
WASTEWATER FUND:	
Reserve Funds	$21,775
PROMOTION FUND:	
Reserve Funds	$3,500
TOTAL SUPPLEMENTAL FUNDING	$105,050

FUNDS EXPENDED THROUGH GENERAL FUND:	
Attorney – Small Claims Fees	$1,000
Public Buildings – Insurance – Property	$600
Public Buildings – ADA Requirements	$1,500
Public Buildings – Repairs/Maintenance	$43,500
Street Department – Repair & Maintenance	$5,000
Swimming Department – Repair & Maintenance	$9,500
Parks Department – Insurance – Property	$575
Parks Department – Repair & Maintenance	$5,500
Promoting the City – Economic Development Corp	$10,000

WATER FUND	
Repair & Maintenance	$2,600
WASTEWATER FUND	
Property Insurance	$1,775
Repair & Maintenance	$10,000
AP Motors & Pumps Maintenance	$10,000
PROMTION FUND	
City Recreation Funds	$3,500
TOTAL SUPPLEMENTAL APPROPRIATION	**$105,050**

SECTION II: that no levy shall be made for any part of said $105,050 from the 2016 funds here-in-above stated.

TRANSFERRING OF BUDGET FUNDS

FUNDS DERIVED FROM		
GENERAL FUND:		
100-4312-42110	Insurance - Property	$3,100
100-4200-42901	Deer Management Plan	$4,700
100-4312-42600	Supplies	$5,000
100-4850-43311	4312 Street Hard Paving Project	$50,000
300-4330-42110	Insurance - Property	$1,475
FUNDS EXPENDED THROUGH		
GENERAL FUND:		
100-4192-42110	Insurance - Property	$3,100
100-4200-42520	Paint Crosswalks/Parking Lines	$1,700
100-4220-42602	Traffic Signs	$3,000
100-4312-42500	Repair and Maintenance	$5,000
100-4850-43200	4192 GG Buildings Improvements	$50,000
400-4325-42100	Insurance - Property	$1,475
TOTAL BUDGET TRANSFER		$64,275

SECTION III: that all ordinances and parts of ordinances in conflict with this ordinance are hereby repealed.

SECTION IV: that this ordinance, being an ordinance for the support of the municipal government and its existing public institutions, shall be in full force and effect immediately upon its passage and publication as provided by law.

SECTION V: that should any section or sections of this ordinance be declared invalid or unconstitutional by a Court of the last resort, the same shall not invalidate the remaining sections of this ordinance.

Dated this 7th day of November 2016.

CITY OF CUSTER CITY

ATTEST:

Jared Carson, Mayor

Laurie Woodward
Finance Officer

(SEAL)

Vote: Fischer: Nielsen:
Schleining: Heinrich:
Blom: Maciejewski:

First Reading: October 17, 2016
Second Reading: November 7, 2016
Publication: November 16, 2016

RESOLUTION # 11-07-16A

WHEREAS, the City of Custer City has previously adopted an Employee Manual; and

WHEREAS, updating and amending of said Employee Personnel Manual was provided for in Resolution 6-06-16B; and

WHEREAS, the Common Council of the City of Custer City has determined that a Public Works Department Working Foreman position description is necessary and desirable.

WHEREAS, the Common Council of the City of Custer City has determined that the Park Supervisor position is no longer desirable.

NOW THEREFORE BE IT RESOLVED that the Employee Personnel Manual is amended to include the attached exhibit "A", Public Works Department Working Foreman Position Description, as though set forth in full herein, and adopted by reference; and the Park Supervisor position removed.

Dated this 7th day of November, 2016

_____
City of Custer City
Jared Carson, Mayor

Attest:_____
Laurie Woodward
Finance Officer

(Seal)

PUBLIC WORKS DEPARTMENT WORKING FORMAN

The Working Foreman will assist the Public Works Director (PWD) and Public Works Supervisor (PWS) in the day to day operation of the Public Works Department and assume supervisory duties when the PWD and PWS are absent. The Working Foreman job description is in addition to the Inter-Department Operator job description.

Examples of Duties:

The Working Foreman duties will include assignment of employees, handling citizen complaints and concerns, prioritizing projects, problem solving and other duties as assigned by the PWD or PWS.

The Working Foreman will assume a leadership role in the Parks and Buildings Department and will possess above average skills in areas such as interaction with citizens and fellow employees, knowledge of all aspects of the services that we provide, excellent math, computer and telephone skills, dependability and most importantly exhibit a "can-do" attitude.

The Working Foreman shall attend Custer Park and Recreation Committee meetings, conduct park and building safety inspections, will work rotating weekend schedule.

Qualifications:

To perform the job successfully, an individual must be able to complete each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill and ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Education and/or Experience

A high school diploma and experience in public works operations is required. Applicants for the position must be a current employee of the Custer Public Works Department

The Working Foreman will not be directly involved in any disciplinary action involving union employees. In the event of a disciplinary emergency, the PWD or PWS will address the issue.

The Director of Public Works reserves the right to modify the duties, If the position were to be terminated the affected employee would be re-assigned to the position of Inter-Department Maintenance at their appropriate step rate of pay. An employee will have the right to resign the Working Foreman position after providing a letter of intent to the Director. The employee would then be re-assigned to the position of Inter-Department Maintenance at their appropriate step rate of pay.

Knowledge, Skills and Abilities:

Language Skills

Ability to read and interpret documents such as safety rules, operating and maintenance instructions and manuals and procedures manuals. Ability to write routine reports. The ability to read, write, understand and communicate in the English language is mandatory.

Mathematical Skills

Ability to add, subtract, multiple and divide in all units of measure using whole numbers, common fractions and decimals.

Reasoning Ability

Ability to use common sense understanding to carry out instructions furnished in written, oral or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.

Certificates/Licenses/Registration
Must possess a valid South Dakota regular and commercial driver's license, with Air Brake and Tanker Endorsements.

Other Qualifications
Knowledge and training in the operation and repair of heavy equipment. General knowledge of various construction trades and crafts. Ability to work nights, weekends, overtime and odd hours when emergencies require. Must reside within 15 miles of the City of Custer

Physical Demands:

The physical demands described here are representative of those that must be met by the employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to use hands to finger, handle or feel; reach with hands and arms; stoop, kneel, crouch, or crawl; and talk or hear. The employee is occasionally required to stand, walk, and sit. The employee must frequently lift up to 50 pounds and occasionally lift and/or move up to 100 pounds. Specific vision abilities required by this job include close vision, distance vision, and the ability to adjust focus.

Work Environment:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

While performing the duties of this job, the employee is frequently exposed to moving mechanical parts, fumes or airborne particles, and toxic or caustic chemicals. The employee is occasionally exposed to outside weather conditions, risk of electrical shock, and vibration. The noise level in the work environment is usually loud.

EQUIPMENT USED:

Hand tools, power tools, trucks, highway and construction equipment; welding equipment, gauges, meters, measuring devices, calculators, copy machine, computers, and computerized vehicle equipment.

RESOLUTION # 11-07-16B

RESOLUTION ADOPTING THE CUSTER CITY WEST DAM

EMERGENCY ACTION PLAN

WHEREAS, the City of Custer West Dam Emergency Action Plan (EAP) has been prepared;

WHEREAS, Custer County and South Dakota Department of Environment & Natural Resources has been afforded the opportunity to participate, comment, and provide input in the plan content and mitigation strategies; and

WHEREAS, Custer County and South Dakota Department of Environment & Natural Resources has reviewed and signed off on the Emergency Action Plan; and

WHEREAS, the City of Custer will annually review and update as necessary the Emergency Action Plan.

NOW THEREFORE BE IT RESOLVED by the Custer City Council that it adopts the Custer City West Dam Emergency Action Plan, and resolves to participate in the accomplishments of the actions therein.

Dated this 7th day of November, 2016

_____

City of Custer City
Jared Carson, Mayor

Attest:_____
Laurie Woodward
Finance Officer

(Seal)

Emergency Action Plan (EAP)

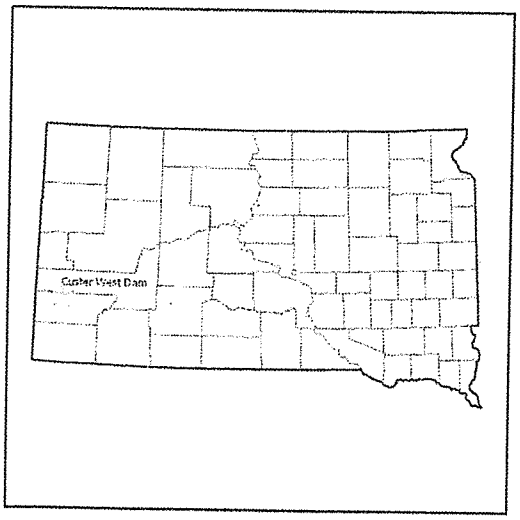
City of Custer West Dam

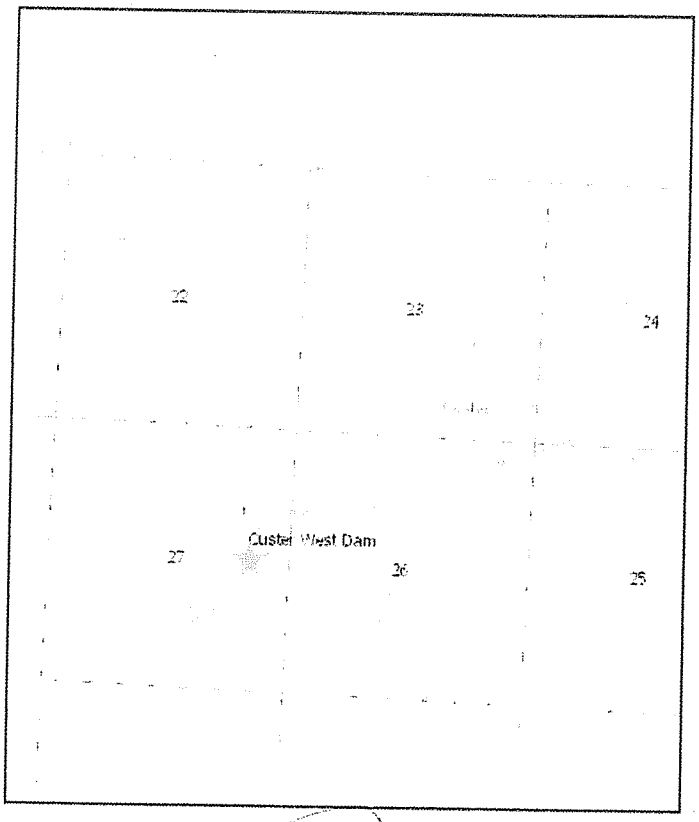
National Inventory of Dams (NID) No. SD02616

In Custer County, South Dakota

City of Custer – Dam Operator

With assistance from the
SD Department of Environment
and Natural Resources





Reviewed and Updated:

Jared Carson - Mayor
City of Custer
6-21-16
Date

Mike Carter, Custer County Emergency Manager
Custer County, SD
6-21-2016
Date

Copy _____

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Basic EAP Data

Purpose

The purpose of this EAP is to reduce the risk of human life loss and injury and minimize property damage during an unusual or emergency event associated with Custer's West Dam located west of Custer, SD.

Potential Impacted Area

See *Evacuation Map* tab (Appendix B–2a and Appendix B–2b) and *People at Risk* tab (Appendix B–3) for the locations and contact information for the following entities that may be flooded if the dam should fail:

There are several residences and many businesses located immediately downstream from the dam should an extreme flood event and dam breaching occur. See Appendix B.

Dam Description

Height: 13 ft

Originally Built: 1940's **
Reconstruction Planned: 2018
Engineer (2016): Banner Associates, Inc.
Owner: City of Custer

Legal Description: NE ¼ SE ¼ Section 27 Township 3S Range 4E of the Black Hill Meridian
Latitude: 43.7596 Longitude: -103.6214
Drainage Area: 36 sq. mi.
Hazard Classification: High
National Inventory of Dams No.: SD 02616

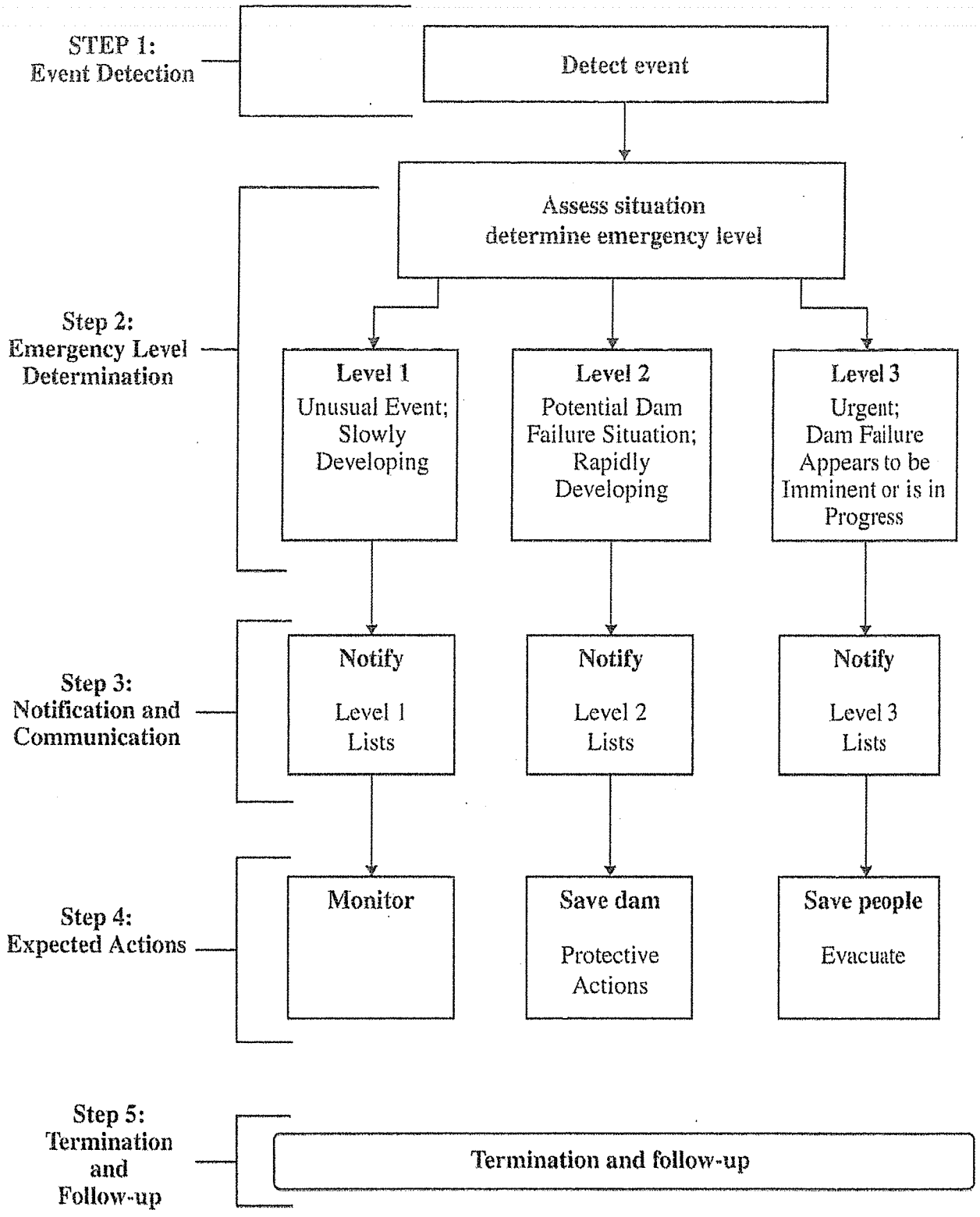
See additional design data in *Appendix B* tab.

Note **: Existing spillway and embankment are inadequate. This EAP required for submittal by State Law is for the proposed new embankment and spillway to carry the full inflow design flood. Construction is currently slated for year 2018 or later.

Directions to dam (See *Location and Vicinity Map*; Appendix B–1.)

Custer West Dam can be accessed by traveling 1.3 miles west on Highway 16 from the junction of Highway 385 North located in downtown Custer, SD.

EAP Overview



Roles and Responsibilities

Dam Operator's Representative (City of Custer Public Works Director)

- As soon as an emergency event is observed or reported, immediately determine the emergency level (see *Emergency Levels* tab).
  - Level 1: unusual event, slowly developing
  - Level 2: potential dam failure situation, rapidly developing
  - Level 3: dam failure appears imminent or is in progress
- Immediately notify the personnel in the order shown on the notification chart for the appropriate level (see *Notification Charts* and *Communications* tabs).
- Provide updates of the situation to the police/sheriff dispatcher to assist them in making timely and accurate decisions regarding warnings and evacuations.

Dam Operator's Representative (City of Custer Representative)

- Provide leadership to assure the EAP is reviewed and updated annually and copies of the revised EAP are distributed to all who received copies of the original EAP.

Incident Commander (County Sheriff)

- Serve as the primary contact person responsible for coordination of all emergency actions.
- When a Level 2 situation occurs: Prepare emergency management personnel for possible evacuations that may be needed if a Level 3 situation occurs.
- When a Level 3 situation occurs:
  - Initiate warnings and order evacuation of people at risk downstream of the dam.
  - Notify local emergency management services to carry out the evacuation of people and close roads within the evacuation area (see *Evacuation Map* tab).
- Decide when to terminate the emergency.
- Participate in an annual review and update of the EAP.

Emergency Management Services (County Emergency Manager)

- Maintain communication with media.
- When a Level 2 situation occurs:
  - Prepare emergency management personnel for possible evacuations that may be needed if a Level 3 situation occurs.
  - Alert the public as appropriate.
- When a Level 3 situation occurs:
  - Alert the public.
  - Immediately close roads and evacuate people within the evacuation area (see *Evacuation Map* tab).
- Participate in an annual review and update of the EAP.

Dam Operator's Technical Representatives (SD DENR State Representative)

- Advise the dam operator of the emergency level determination, if time permits.
- Advise the dam operator of remedial actions to take if Level 2 event occurs, if time permits.

State Dam Safety Agency (SD DENR State Dam Safety Official)

- Advise the dam operator of the emergency level determination, if time permits.
- Advise the dam operator of remedial actions to take if Level 2 event occurs, if time permits.

The Five-step EAP Process

Step 1 Event Detection

This step describes the detection of an unusual or emergency event and provides information to assist the dam operator in determining the appropriate emergency level for the event.

Unusual or emergency events may be detected by:

- Observations at or near the dam by government personnel (city, state, or Federal), landowners, visitors to the dam, or the public
- Evaluation of instrumentation data (currently none)
- Earthquakes felt or reported in the vicinity of the dam
- Forewarning of conditions that may cause an unusual event or emergency event at the dam (for example, a severe weather or flash flood forecast)

See *Guidance for Determining the Emergency Level* table for assistance in evaluating specific events to determine if they are unusual or potential emergency situations.

Step 2 Emergency Level Determination

After an unusual or emergency event is detected or reported, the City of Custer, SD Public Works (PW) Director, or his alternate is responsible for classifying the event into one of the following three emergency levels:

Emergency Level 1—Nonemergency, unusual event, slowly developing:

This situation is not normal but has not yet threatened the operation or structural integrity of the dam, but possibly could if it continues to develop. DENR state technical representatives and SD Department of Environment and Natural Resources (DENR) state dam safety officials should be contacted to investigate the situation and recommend actions to take. The condition of the dam should be closely monitored, especially during storm events, to detect any development of a potential or imminent dam failure situation. The Sheriff should be informed if it is determined that the conditions may possibly develop into a worse condition that may require emergency actions.

Emergency Level 2—Potential dam failure situation, rapidly developing:

This situation may eventually lead to dam failure and flash flooding downstream, but there is not an immediate threat of dam failure. The Sheriff should be notified of this emergency situation and placed on alert. The dam operator should closely monitor the condition of the dam and periodically report the status of the situation to the Sheriff. If the dam condition worsens and failure becomes imminent, the Sheriff must be notified immediately of the change in the emergency level to evacuate the people at risk downstream.

If time permits, DENR state technical representative and DENR state dam safety official should be contacted to evaluate the situation and recommend remedial actions to prevent failure of the dam. The dam operator should initiate remedial repairs. Time available to employ remedial actions may be hours or days.

This emergency level is also applicable when flow through the earth spillway has or is expected to result in flooding of downstream areas and people near the channel could be endangered. Emergency services should be on alert to initiate evacuations or road closures if the flooding increases.

Emergency Level 3—Urgent; dam failure appears imminent or is in progress:

This is an extremely urgent situation when a dam breach failure is occurring or obviously is about to occur and cannot be prevented. Flash flooding will occur downstream of the dam. This situation is also applicable when flow through the primary and auxiliary spillway(s) is causing downstream flooding of people and roads. The Sheriff should be contacted immediately so emergency services can begin evacuations of all at-risk people and close roads as needed (see *Evacuation Map* and *People at Risk* tabs).

See the following pages for guidance in determining the proper emergency level for various situations.

See the *Notification Charts* tab for the contact flow charts to be used for each Emergency Level.

Guidance for Determining the Emergency Level

Event	Situation	Emergency level*
Auxiliary (Emergency) Spillway Flow	Reservoir water surface elevation at spillway crest or spillway is flowing with no active erosion	1
	Spillway flowing with active gully erosion	2
	Spillway flow that could result in flooding of people downstream if the reservoir level continues to rise	2
	Spillway flowing with an advancing headcut that is threatening the control section	3
	Spillway flow that is flooding people downstream	3
Embankment Overtopping	Reservoir level is 1 foot below the top of the dam	2
	Water from the reservoir is flowing over the top of the dam	3
Seepage	New seepage areas in or near the dam	1
	New seepage areas with cloudy discharge or increasing flow rate	2
	Seepage with discharge greater than 10 gallons per minute	3
Sinkholes	Observation of new sinkhole in reservoir area or on embankment	2
	Rapidly enlarging sinkhole	3
Embankment Cracking	New cracks in the embankment greater than ¼-inch wide without seepage	1
	Cracks in the embankment with seepage	2
Embankment Movement	Visual movement/slippage of the embankment slope	1
	Sudden or rapidly proceeding sliding of embankment slopes	3
Instruments	Instrumentation readings beyond predetermined values	1
Earthquake	Measurable earthquake felt or reported within 50 miles of the dam	1
	Earthquake resulting in visible damage to the dam or appurtenances	2
	Earthquake resulting in uncontrolled release of water from the dam	3
Security threat	Verified bomb threat that, if carried out, could result in damage to the dam	2
	Detonated bomb that has resulted in damage to the dam or appurtenances	3
Sabotage/ Vandalism	Damage to dam or appurtenance with no impacts to the functioning of the dam	1
	Modification to the dam or appurtenances that could adversely impact the functioning of the dam	1
	Damage to dam or appurtenances that has resulted in seepage flow	2
	Damage to dam or appurtenances that has resulted in uncontrolled water release	3

* Emergency Level 1: Nonemergency unusual event, slowly developing
* Emergency Level 2: Potential dam failure situation, rapidly developing
* Emergency Level 3: Urgent; dam failure appears imminent or is in progress

Examples of Emergency Situations

The following are examples of conditions that usually constitute an emergency situation that may occur at a dam. Adverse or unusual conditions that can cause the failure of a dam are typically related to aging or design and construction oversights. Extreme weather events that exceed the original designed conditions can cause significant flow through the auxiliary spillway or overtopping of the embankment. However, accidental or intentional damage to the dam may also result in emergency conditions. The conditions have been grouped to identify the most likely emergency-level condition. The groupings are provided as guidance only. Not all emergency conditions may be listed, and the dam operator is urged to use conservative judgment in determining whether a specific condition should be defined as an emergency situation at the dam.

Pre-existing conditions on this dam: 1940's constructed embankment is slated for removal. This EAP is based on construction of new dam and spillway structures.

Auxiliary (Emergency) Spillway Flows

Emergency Level 2—Potential dam failure situation; rapidly developing:

1. Significant erosion or head-cutting of the spillway is occurring, but the rate does not appear to threaten an imminent breach of the spillway crest that would result in an uncontrolled release of the reservoir.
2. Flow through the earth auxiliary spillway is or is expected to cause flooding that could threaten people, homes, and/or roads downstream from the dam.

Emergency Level 3—Urgent; dam failure appears imminent or is in progress:

1. Significant erosion or head-cutting of the spillway is occurring at a rapid rate, and a breach of the control section appears imminent.
2. Flow through the earth auxiliary spillway is causing flooding that is threatening people, homes, and/or roads downstream from the dam.

Embankment Overtopping

Emergency Level 2—Potential dam failure situation; rapidly developing:

1. The reservoir level is within 1 foot from the top of the dam.

Emergency Level 3—Urgent; dam failure appears imminent or is in progress:

1. The reservoir level has exceeded the top of the dam, and flow is occurring over the embankment.

Seepage and Sinkholes

Emergency Level 2—Potential dam failure situation; rapidly developing:

1. Cloudy seepage or soil deposits are observed at seepage exit points or from internal drain outlet pipes.
2. New or increased areas of wet or muddy soils are present on the downstream slope, abutment, and/or foundation of the dam, and there is an easily detectable and unusual increase in volume of downstream seepage.
3. Significant new or enlarging sinkhole(s) near the dam or settlement of the dam is observed.
4. Reservoir level is falling without apparent cause.
5. The following known dam defects are or will soon be inundated by a rise in the reservoir:
   - Sinkhole(s) located on the upstream slope, crest, abutment, and/or foundation of the dam; or
   - Transverse cracks extending through the dam, abutments, or foundation.

Emergency Level 3—Urgent; dam failure appears imminent or is in progress:

1. Rapidly increasing cloudy seepage or soil deposits at seepage exit points to the extent that failure appears imminent or is in progress.
2. Rapid increase in volume of downstream seepage to the extent that failure appears imminent or is in progress.
3. Water flowing out of holes in the downstream slope, abutment, and/or foundation of the dam to the extent that failure appears imminent or is in progress.
4. Whirlpools or other evidence exists indicating that the reservoir is draining rapidly through the dam or foundation.
5. Rapidly enlarging sinkhole(s) are forming on the dam or abutments to the extent that failure appears imminent or is in progress.
6. Rapidly increasing flow through crack(s) eroding materials to the extent that failure appears imminent or is in progress.

Embankment Movement and Cracking

Emergency Level 2—Potential dam failure situation; rapidly developing:

1. Settlement of the crest, slopes, abutments and/or foundation of the dam that may eventually result in breaching of the dam.
2. Significant increase in length, width, or offset of cracks in the crest, slopes, abutments, and/or foundation of the dam that may eventually result in breaching of the dam.

Emergency Level 3—Urgent; dam failure appears imminent or is in progress:

1. Sudden or rapidly proceeding slides, settlement, or cracking of the embankment crest, slopes, abutments, and/or foundation, and breaching of the dam appears imminent or is in progress.

Step 3 Notification and Communication

Notification

After the emergency level has been determined, the people on the following notification charts for the appropriate emergency level shall be notified immediately.

Communication

Emergency Level 1—Nonemergency, unusual event; slowly developing:

The City of Custer Representative and/or City of Custer PW Director should contact the DENR State Technical Representative and/or DENR State Dam Safety Official. Describe the situation, and request technical assistance on the next steps to take.

Emergency Level 2—Emergency event, potential dam failure situation; rapidly developing:

The following message may be used to help describe the emergency situation:

> *"This is _____ Identify yourself; name and position _____.*
>
> *We have an emergency condition at Custer West Dam, located 1.3 miles west of downtown Custer, SD.*
>
> *We have activated the Emergency Action Plan for this dam and are currently under Emergency Level 2.*
>
> *We are implementing predetermined actions to respond to a rapidly developing situation that could result in dam failure.*
>
> *Please prepare to evacuate the area along low-lying areas below Custer West Dam.*
>
> *Reference the evacuation map in your copy of the Emergency Action Plan.*
>
> *We will advise you when the situation is resolved or if the situation gets worse.*
>
> *I can be contacted at the following number _____. If you cannot reach me, please call the following alternative number _____."*

Emergency Level 3—Urgent event; dam failure appears imminent or is in progress:

The Sheriff should be contacted immediately and the area evacuated (see *Evacuation Map* tab). The following actions should be taken:

1. Call the Sheriff's dispatch center. Be sure to say, "This is an emergency." They will call other authorities and the media and begin the evacuation. The following message may be used to help describe the emergency situation to the Sheriff:

   "This is an emergency. This is __(Identify yourself; name, position)____

   Custer West Dam, located 1.3 miles west of downtown Custer, SD, is failing. The downstream area must be evacuated immediately. Repeat, Custer West Dam is failing; evacuate the area along low-lying areas below Custer West Dam.

   We have activated the Emergency Action Plan for this dam and are currently under Emergency Level 3. Reference the evacuation map in your copy of the Emergency Action Plan.

   I can be contacted at the following number_____. If you cannot reach me, please call the following alternative number_____."

2. Do whatever is necessary to bring people in immediate danger (anyone on the dam, downstream from the dam, boating on the reservoir, or evacuees) to safety if directed by the Sheriff.
3. Keep in frequent contact with the Sheriff or Incident Commander to keep them up-to-date on the condition of the dam. They will tell you how you can help handle the emergency.
4. If all means of communication are lost: (1) try to find out why, (2) try to get to another radio or telephone that works, or (3) get someone else to try to re-establish communications. If these means fail, handle the immediate problems as well as you can, and periodically try to re-establish contact with the Sheriff and emergency services.

The following prescripted message may be used as a guide for the Sheriff or Incident Commander to communicate the status of the emergency with the public:

Attention: This is an emergency message from the Sheriff. Listen carefully. Your life may depend on immediate action.

Custer West Dam, located 1.3 miles west of downtown Custer, SD, is failing. Repeat. Custer West Dam, located 1.3 miles west of downtown Custer, SD, is failing.

If you are in or near this area, proceed immediately to high ground away from the valley. Do not return to your home to recover your possessions. You cannot outrun or drive away from the flood wave. Proceed immediately to high ground away from the valley.

Repeat message.

Emergency Level 3 Notifications

Urgent event, dam failure appears imminent or is in progress

Dam Owner's Local Representative
City of Custer Public Works Director
Bob Morrison
(605) 673-4824 (Office) (605) 673-1422 (Cell)
(605) 673-2411 (Fax)
Email: [illegible]

(1) **Incident Commander**
Custer County Sheriff
Rick Wheeler
(605) 673-8146 (Office – 24 hour)
(605) 673-8154 (Fax)
Email: rwheeler@custercountysd.com

(2) **Custer City Official**
Mayor of Custer
Jared Carson
605-673-4824 (Office)
605-517-0558 (Cell)
Email: mayor@cityofcuster.com

(3) **State Dam Safety Official**
Department of Environment and Natural Resources
Timothy G. Schaal, P.E.
(605) 773-3352 (Office) (605) 222-7326 (Cell)
(605) 224-6576 (Home) (605) 773-4068 (Fax)
Email: Tim.Schaal@state.sd.us

ALTERNATE

ALTERNATE

SD State Radio
Rapid City Office
605-393-8121 (Western SD Office)
Sergeant Jason Husby (State Duty Officer)
(605) 773-3231

Custer County Emergency Management
Mike Carter, Director
(605) 673-8128 (Office) (605) 673-3765 (FAX)
Email: mcarter@custercountysd.com
Communications Center - (605) 673-8176

Custer S.P. Regional Representative
GF&P Custer State Park Manager
Matt Snyder
(605) 255-4515 (Office)
Email: Matt.Snyder@state.sd.us

State Dam Safety Official
Department of Environment and Natural Resources
Jeanne Goodman, P.E.
(605) 773-3352 (Office)
(605) 773-4068 (Fax)
Email: Jeanne.Goodman@state.sd.us

Custer Police Department
Contact Sheriff's Office.
Custer Fire Department
605-473-4080

SD Highway Patrol
Rapid City District
Lieutenant Jason Ketterling
(605) 626-2286 (Office)
(605) 626-2662 (Fax)
(If unable to contact, call SD State Radio)

Custer S.P. Regional Representative
Kevin Stoltz
605-255-4515
605-517-0915 (C)
Kevin.Stoltz@state.sd.us

National Weather Service
Rapid City Weather Forecast Station
605-341-7531
800-952-3917
(24 hours)

CUSTER County Commissioner
Phil Lampert, Chair
605-673-5436 (Office)
605-391-9358 (C)
plampert@custercountysd.com

See *Emer. Services Contacts* tab for contact information for back-ups to the persons shown above and other emergency personnel.

See *Communications* tab for pre-scripted messages.

Note:
1, 2, etc., denotes call sequence

Legend:
Calls by operator
Second level calls

Emergency Level 2 Notifications

Emergency event, potential dam failure situation; rapidly developing

Dam Owner's Local Representative
City of Custer Public Works Director
Bob Morrison
(605) 673-4824 (Office) (605) 673-1422 (Cell)
(605) 673-2411 (Fax)
Email: [redacted]

(1) **Custer City Official**
Mayor of Custer
Jared Carson
605-673-4824 (Office)
605-517-0558 (Cell)
Email: mayor@cityofcuster.com

(2) **Incident Commander**
Rick Wheeler
(605) 673-8146 (Office – 24 hour)
(605) 673-8154 (Fax)
Email: rwheeler@custercountysd.com

(3) **State Dam Safety Official**
Department of Environment and Natural Resources
Timothy Schaal, P.E.
(605) 773-3352 (Office) (605) 222-7326 (Cell)
(605) 224-6576 (Home) (605) 773-4068 (Fax)
Email: Tim.Schaal@state.sd.us

Custer S.P. Regional Representative
GF&P Custer State Park Manager
Matt Snyder
(605) 255-4515 (Office)
Email: Matt.Snyder@state.sd.us

SD State Radio
Rapid City Office
605-393-8121 (Western SD Office)
Sergeant Jason Husby (State Duty Officer)
(605) 773-3231

Custer County Emergency Management
Mike Carter, Director
(605) 673-8128 (Office) (605) 673-3765 (FAX)
Email: mcarter@custercountysd.com
Communications Center - (605) 673-8176

ALTERNATE

State Dam Safety Official
Department of Environment and Natural Resources
Jeanne Goodman, P.E.
(605) 773-3352 (Office)
(605) 773-4068 (Fax)
Email: Jeanne.Goodman @state.sd.us

ALTERNATE

Custer S.P. State Representative
Kevin Stoltz
605-255-4515
605-517-0915 (C)
Kevin.Stoltz@state.sd.us

Custer Police Department
Contact Sheriff's Office.
Custer Fire Department
605-473-4080
605-645-0539 (C)

SD Highway Patrol
Rapid City District
Lieutenant Jason Ketterling
(605) 626-2286 (Office)
(605) 626-2662 (Fax)
(If unable to contact, call SD State Radio)

National Weather Service
Rapid City Weather Forecast Station
605-341-7531
800-952-3917
(24 hours)

CUSTER County Commissioner
Phil Lampert, Chair
605-673-5436 (Office)
605-391-9358 (C)
plampert@custercountysd.com

See *Emer. Services Contacts* tab for contact information for back-ups to the persons shown above and other emergency personnel.

See *Communications* tab for pre-scripted messages.

Note:
1, 2, etc. denotes call sequence

Legend:
Calls by operator
Second level calls

Emergency Level 1 Notifications

Nonemergency unusual event; slowly developing

Dam Owner's Local Representative

City of Custer Public Works Director
Bob Morrison
(605) 673-4824 (Office) (605) 673-1422 (Cell)
(605) 673-2411 (Fax)
Email: bob@cityofcuster.com

(1) **State Dam Safety Official**

Department of Environment and Natural Resources
Timothy G. Schaal, P.E.
(605) 773-3352 (Office) (605) 222-7326 (Cell)
(605) 224-6576 (Home) (605) 773-4068 (Fax)
Email: Tim.Schaal@state.sd.us

(2) **Custer City Official**

Mayor of Custer
Jared Carson
(605) 673-4824 (Office)
605-517-0558 (C)
Email: mayor@cityofcuster.com

Incident Commander

Custer County Sheriff
Rick Wheeler
(605) 673-8146 (Office – 24 hour)
(605) 673-8154 (Fax)
Email: rwheeler@custercountysd.com

ALTERNATE

State Dam Safety Official

Department of Environment and Natural Resources
Jeanne Goodman, P.E.
(605) 773-3352 (Office)
(605) 773-4068 (Fax)
Email: Jeanne.Goodman@state.sd.us

Custer S.P. State Representative

GF&P Custer State Park Manager
Matt Snyder
(605) 255-4515 (Office)
605-593-1624 (C)
Email: Matt.Snyder@state.sd.us

Custer County Emergency Management

Mike Carter, Director
(605) 673-8128 (Office) (605) 673-3765 (FAX)
Email: mcarter@custercountysd.com
Communications Center - (605) 673-8176

ALTERNATE

Custer S.P. State Representative

Kevin Stoltz
605-255-4515
605-517-0915 (C)
Kevin.Stoltz@state.sd.us

See *Emer. Services Contacts* tab for contact information for back-ups to the persons shown above and other emergency personnel.

Note:
1, 2, etc.. denotes call sequence

Legend:
Calls by operator ——————
Second level calls

Emergency Services Contacts

	Principal Contact, Title Agency / Organization	Email Address	Address	Office Telephone Number	Alt. Telephone Numbers
County Contacts	***Phil Lampert, Chair** Custer County Board of Commissioners	plampert@custercountysd.com	420 Mt. Rushmore Rd. Custer, SD 57730	605-673-5436	605-391-9358 (C)
	Bob Morrison, PW Director City of Custer, SD	bob@cityofcuster.com	622 Crook Street Custer, SD 57730	605-673-4824	605-673-1422 (C)
	Rick Wheeler, Sheriff Custer County, SD	rwheeler@custercountysd.com	420 Mt. Rushmore Rd. Custer, SD 57730	605-673-8146	605-673-8146 (Dispatch)
	Mike Carter, Director Custer County Emergency Management	mcarter@custercountysd.com	420 Mt. Rushmore Rd. Custer, SD 57730	605-673-8128	605-673-8176 (Communications Center)
	Gary Woodford, Hwy. Supt. Custer County Highway Department	cuscosup@gwtc.net	RR1 Box 101x Custer, SD 57730	605-673-5678	605-673-8166 (F)
State Contacts	**Matt Snyder** SD GF&P Custer S.P. Superintendent	Matt.Snyder@state.sd.us	13329 US Hwy 16A Custer, SD 57730	(605) 255-4515	605-593-1624 (C)
	Todd Seaman SD Dept. of Transportation, Rapid City Region (SD DOT)	Todd.Seaman@state.sd.us	2300 Eglin Street PO Box 1970 Rapid City, SD 57709	605-394-2244	605-381-7154 (C)
	***Kevin Stoltz SD GF&P Custer S.P. Alternate Contact**	Kevin.Stoltz@state.sd.us	13329 US Hwy 16A Custer, SD 57730	605-255-4515	605-517-0915 (C)
	Tim Schaal, - Dam Safety SD Dept. of Environment and Natural Resources (SD DENR)	Tim.Schaal@state.sd.us	523 East Capitol Avenue Pierre, SD 57501	605-773-3352	605-224-6576 (H) 605-222-7326 (C) 605-773-4068 (F)
	***Jeanne Goodman – Chief Engineer** SD Dept. of Environment and Natural Resources (SD DENR)	Jeanne.Goodman@state.sd.us	523 East Capitol Avenue Pierre, SD 57501	605-773-3352	605-773-4068 (F)
	Rich Zacher South Dakota Department of Transportation, Custer, SD	Rich.Zacher@state.sd.us	115 Centennial Drive Custer, SD 57730	605-673-4948	605-440-3484 (C)
Emergency Contacts	**Jim Lyon Custer Fire Department**	Jimlyon@fesamerica.com	616 Crook St. Custer, SD 57730	605-473-4080	605-645-0539 (C)
	Lieutenant Jason Ketterling SD Highway Patrol Rapid City District	Jason.Ketterling@state.sd.us	PO Box 2474 Rapid City, SD 57709-2474	Phone: 605.394.2286 Fax: 605.394.5483	If unable to contact, call Sheriff.
	National Weather Service Rapid City Forecast Office		300 E. Signal Drive Rapid City, SD 57701	605-341-7531	800-952-3917 (24 hours)
	SD State Radio – Duty Officer	Sergeant Jason Husby (State Duty Officer)	Rapid City Office 605-393-8121	605-773-3536	605-773-3231 (Duty Officer)

* Back-up to primary contact

Step 4 Expected Actions

If the police or Sheriff receives a 911 call regarding observations of an unusual or emergency event at the dam, they should immediately contact the Custer City Representative. After the Custer City Representative determines the emergency level, the following actions should be taken. If time permits, the Custer County Emergency Services Manager and SD DENR Dam Safety Official should be contacted for technical consultation.

Emergency Level 1—Nonemergency, unusual event; slowly developing:

A. The City of Custer Representative should inspect the dam. At a minimum, inspect the full length of the upstream slope, crest, downstream toe, and downstream slope. Also, check the reservoir area, abutments, and downstream channel for signs of changing conditions. **If increased seepage, erosion, cracking, or settlement are observed, immediately report the observed conditions to the Custer County Emergency Services Manager and DENR Dam Safety Official; refer to the emergency level table for guidance in determining the appropriate event level for the new condition and recommended actions.**

B. Record all contacts that were made on the *Contact Checklist* (Appendix A–1). Record all information, observations, and actions taken on the *Event Log Form* (Appendix A–2). Note the time of changing conditions. Document the situation with photographs and video, if possible.

C. The City of Custer Representative should contact the Custer Co. Emergency Services Manager and SD DENR to request technical staff to investigate the situation and recommend corrective actions.

Emergency Level 2—Potential dam failure situation; rapidly developing:

A. The City of Custer Representative should contact the Custer Co. Emergency Services Manager, Custer S.P. Superintendent and SD DENR to report the situation and, if time permits, request technical staff to investigate the situation and recommend corrective actions.

B. The City of Custer Representative should contact the Sheriff to inform him/her that the EAP has been activated and if current conditions get worse, an emergency situation may require evacuation. Preparations should be made for possible road closures and evacuations.

C. Provide updates to the Sheriff or Incident Commander to assist them in making timely decisions concerning the need for warnings, road closures, and evacuations.

D. If time permits, the City of Custer Representative should inspect the dam. At a minimum, inspect the full length of the upstream slope, crest, downstream toe, and downstream slope. Also, check the reservoir area, abutments, and downstream channel for signs of changing conditions. **If either piping, increased seepage, erosion, cracking, or settlement are observed, immediately report the observed conditions to the SD DENR and Custer S.P. Superintendent; refer to the emergency level table for guidance in determining the appropriate event level for the new condition and recommended actions.**

E. Record all contacts that were made on the *Contact Checklist* (Appendix A–1). Record all information, observations, and actions taken on the *Event Log Form* (Appendix A–2). Note the time of changing conditions. Document the situation with photographs and video, if possible.

F. If time permits, the following emergency remedial actions should be taken as appropriate:

Emergency Level 2—Potential dam failure situation; rapidly developing—continued:

Emergency remedial actions

If time permits, the following emergency remedial actions should be considered for Emergency Level 2 conditions. Immediate implementation of these remedial actions may delay, moderate, or prevent the failure of the dam. Several of the listed adverse or unusual conditions may be apparent at the dam at the same time, requiring implementation of several modes of remedial actions. Close monitoring of the dam must be maintained to confirm the success of any remedial action taken at the dam. Time permitting, any remedial action should be developed through consultation with Custer City and SD DENR Officials.

Embankment overtopping

1. If the water level in the reservoir is no longer rising, place sandbags along the low areas of the top of the dam to control wave action, reduce the likelihood of flow concentration during minor overtopping, and to safely direct more water through the auxiliary spillway.
2. Cover the weak areas of the top of the dam and downstream slope with riprap, sandbags, plastic sheets, or other materials to provide erosion-resistant protection.

Seepage and sinkholes

1. Open the low level drain valve to lower the reservoir level as rapidly as possible to a level that stops or decreases the seepage to a nonerosive velocity. If the drain valve is damaged or blocked, pumping or siphoning may be required.

   Continue lowering the water level until the seepage stops.
2. If the entrance to the seepage origination point is observed in the reservoir (possible whirlpool) and is accessible, attempt to reduce the flow by plugging the entrance with readily available materials such as hay bales, bentonite, soil or rockfill, or plastic sheeting.
3. Cover the seepage exit area(s) with several feet of sand/gravel to hold fine-grained embankment or foundation materials in place. Alternatively, construct sandbag or other types of ring dikes around seepage exit areas to retain a pool of water, providing backpressure and reducing the erosive nature of the seepage.
4. Prevent vehicles and equipment from driving between the seepage exit points and the embankment to avoid potential loss from the collapse of an underground void.

Embankment movement

1. Open the low level drain valve and lower the reservoir to a safe level at a rate commensurate with the urgency and severity of the condition of the slide or slump. If the drain valve is damaged or blocked, pumping or siphoning may be required.
2. Repair settlement of the crest by placing sandbags or earth and rockfill materials in the damaged area to restore freeboard.
3. Stabilize slides by placing a soil or rockfill buttress against the toe of the slide.

Emergency Level 3—Urgent; dam failure appears imminent or is in progress:

A. The Custer City Representative shall immediately contact the Sheriff and others shown on the notification chart.

B. The Sheriff shall lead the efforts to carry out warnings, close roads, and evacuate people at risk downstream from the dam (see *Evacuation Map* tab).

C. Emergency management services personnel shall alert the public and immediately evacuate at-risk people and close roads as necessary.

D. The Custer City Representative shall maintain continuous communication and provide the Sheriff or Incident Commander with updates of the situation to assist him/her in making timely decisions concerning warnings and evacuations.

E. The City of Custer Representative should record all contacts that were made on the *Contact Checklist* (Appendix A–1). Record all information, observations, and actions taken on the *Event Log Form* (Appendix A–2). Note the time of changing conditions. Document the situation with photographs and video, if possible.

F. Advise people monitoring the dam to follow safe procedures. Emergency responders should stay away from any of the failing structures, embankment slopes or spillway areas where the potential for breach failure is high. Potential Downstream inundation areas should be avoided.

Step 5 Termination

Whenever the EAP has been activated, an emergency level has been declared, all EAP actions have been completed, and the emergency is over, the EAP operations must eventually be terminated and follow-up procedures completed.

Termination responsibilities

The Sheriff or Incident Commander is responsible for terminating EAP operations and relaying this decision to the City of Custer Representative. It is then the responsibility of each person to notify the same group of contacts that were notified during the original event notification process to inform those people that the event has been terminated.

Prior to termination of an Emergency Level 3 event that has not caused actual dam failure, the Custer City Representative and DENR State Dam Safety Official will inspect the dam or require the inspection of the dam to determine whether any damage has occurred that could potentially result in loss of life, injury, or property damage. If it is determined that conditions do not pose a threat to people or property, the Sheriff or Incident Commander will be advised to terminate EAP operations as described above.

Prior to termination of the EAP, the City of Custer Representative shall establish a date for review of the actions taken with all participating parties. The City of Custer Representative shall complete the *Dam Safety Emergency Situation Report* (Appendix A–3) to document the emergency event and all actions that were taken as soon as practical following termination of the event, but not later than 2 weeks after termination date.

Maintenance—EAP Review and Revision

EAP annual review

The City of Custer Public Works (PW) Director or his Representative will review and, if needed, update the EAP at least annually. The EAP annual review will include the following:

- Calling all contacts on the three notification charts in the EAP to verify that the phone numbers and persons in the specified positions are current. The EAP will be revised if any of the contacts have changed.
- Contacting the local law enforcement agency to verify the phone numbers and persons in the specified positions. In addition, the PW Director will ask if the person contacted knows where the EAP is kept and if responsibilities described in the EAP are understood.

Revisions

The City of Custer Representative is responsible for updating the EAP document. The EAP document held by the City of Custer PW Director is the master document. When revisions occur, the PW Director will provide the revised pages and a revised revision summary page to all the EAP document holders. The document holders are responsible for revising outdated copy of the respective document(s) whenever revisions are received. Outdated pages shall be immediately discarded to avoid any confusion with the revisions.

Record of Holders of Control Copies of this EAP

Copy Number	Organization and Address	Person receiving copy
1 Master	City of Custer, SD Custer, SD	Bob Morrison City Representative
2	SD Dept. of Game, Fish & Parks Custer State Park	Matt Snyder Superintendent
3	SD Dept. of Game, Fish & Parks Custer State Park	Kevin Stoltz Alternate Contact
4	SD Dept. of Environment and Natural Resources 523 E. Capitol Ave., Pierre, SD 57501	Tim Schaal State Dam Safety Official
5	Custer County, SD Custer, SD	Rick Wheeler Sheriff
6	Custer County Emergency Management Custer, SD	Mike Carter County Emergency Manager
7	SD Dept. of Public Safety Office of Emergency Mgmt 118 W. Capitol Ave., Pierre, SD 57501	Marc Macy CFM
8	Custer County Board of Commissioners Custer, SD	Phil Lampert Chair
9	City of Custer, SD Custer, SD	Jared Carson Mayor
10		
11		
12		
13		
14		

Record of Revisions and Updates Made to EAP

Revision Number	Date	Revisions made	By whom

Concurrences

By my signature, I acknowledge that I, or my representative, have reviewed this plan and concur with the tasks and responsibilities assigned herein for me and my organization.

1. _____ Jared Carson 6-27-16
Signature *Printed Name* *Date*
Printed title: Mayor, City of Custer, SD

2. _____ Jeanne Goodman 6/23/16
Signature *Printed Name* *Date*
Printed title: Chief Engineer, South Dakota Department of Environment and Natural Resources

3. _____ PHIL LAMPERT 6-27-16
Signature *Printed Name* *Date*
Printed title: Chair, Custer County Board of Commissioners

Appendices
Forms, Glossary, Maps, and Supporting Data

Appendix A

A–1 Contact Checklist

A–2 Unusual or Emergency Event Log Form

A–3 Dam Emergency Situation Report Form

A–4 Glossary of Terms

Appendix B

B–1 Location and Vicinity Map

B–2a Evacuation Map

B-2b Evacuation Map with Aerial

B–3 Residents/Businesses/Highways at Risk

B–4 Plan View of Dam

B–5 Reservoir Capacity Graph

B–6 Spillway Discharge Curves

B–7 National Inventory of Dams (NID) Data

Appendix A–1
Contact Checklist

Custer West Dam NID SD_02616

Custer County, South Dakota Date _____

The following contacts should be made immediately after the emergency level is determined (see pages 7–10 for guidance to determine the appropriate emergency level for a specific situation). The person making the contacts should initial and record the time of the call and who was notified for each contact made. See the *Notification Charts* tab for critical contact information and *Additional Contacts* tab for contact information for other possible emergency services.

Emergency Level 1 (see page 12)	Person Contacted	Time Contacted	Contacted by
___ DENR State Dam Safety Official			
___ City of Custer Official			
___ Sheriff or Incident Commander			

Emergency Level 2 (see page 13)	Person Contacted	Time Contacted	Contacted by
____ City of Custer Official			
____ Sheriff or Incident Commander			
____ DENR State Dam Safety Official			

Emergency Level 3 (see page 14)	Person Contacted	Time Contacted	Contacted by
____ Sheriff or Incident Commander			
____ DENR State Dam Safety Official			
____ City of Custer Official			

NOTE: Persons with contact responsibilities not as shown on this sheet are encouraged to create a similar contact checklist sheet for their use.

Appendix A–2

Unusual or Emergency Event Log

(to be completed during the emergency)

Dam name: Custer West Dam County: Custer

National Inventory of Dams (NID) No.: SD02616

When and how was the event detected?

Weather conditions:

General description of the emergency situation:

Emergency level determination: Made by:

Actions and Event Progression

Date	Time	Action/event progression	Taken by

Report prepared by: Date:

Appendix A-3

Dam Emergency Situation Report

(to be completed following the termination of the emergency)

Dam name: Custer West Dam
National Inventory of Dams (NID) No.: SD02616
Dam location: 1.3 miles west of downtown Custer, SD (*City*) Custer County (*County*)
Date: _____ Time: _____

Weather conditions: _____

General description of emergency situation: _____

_____

_____

Area(s) of dam affected: _____

_____

_____

Extent of dam damage: _____

Possible cause(s): _____

Effect on dam's operation: _____

Initial reservoir elevation: _____ Time: _____

Maximum reservoir elevation: _____ Time: _____

Final reservoir elevation: _____ Time: _____

Description of area flooded downstream/damages/injuries/loss of life: _____

_____

_____

Other data and comments: _____

_____

Observer's name and telephone number: _____

Report prepared by: _____ Date: _____

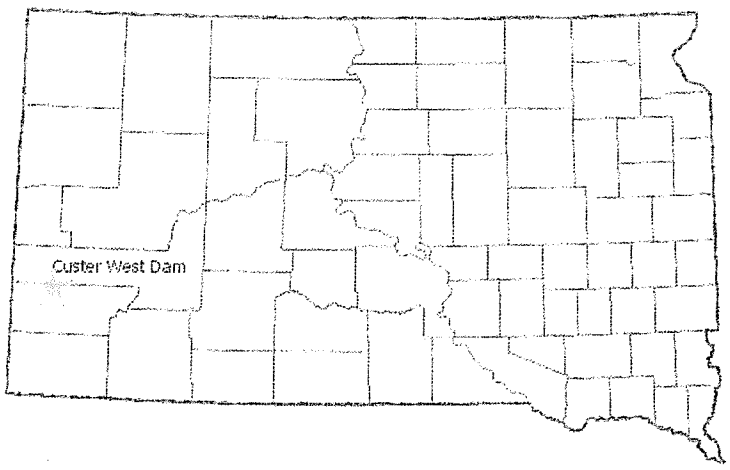
Appendix A–4
Glossary of Terms

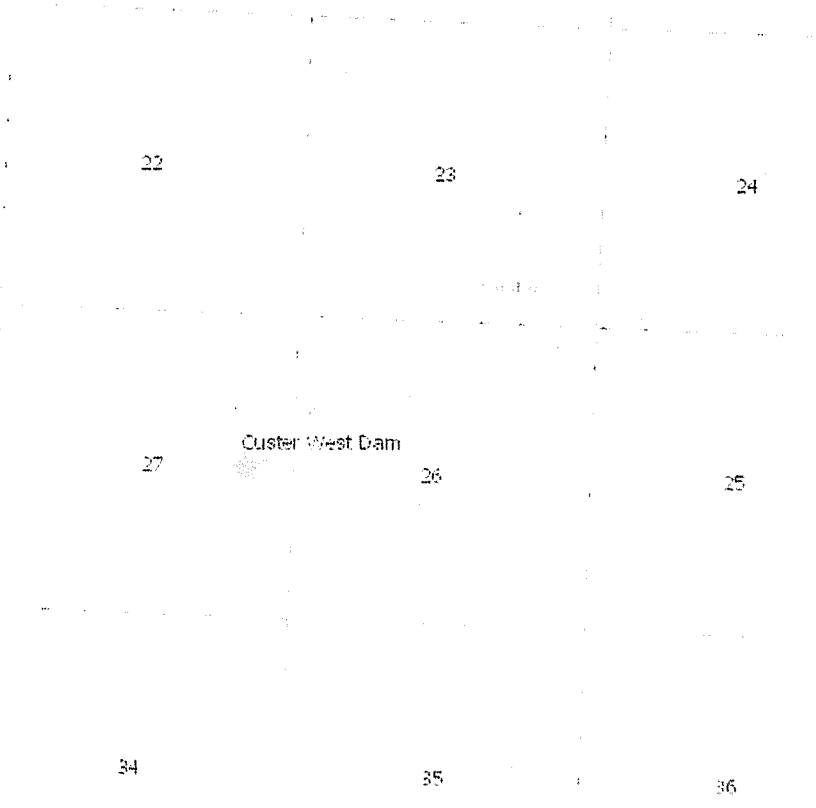
Abutment	That part of the valleyside against which the dam is constructed. The left and right abutments of dams are defined with the observer looking downstream from the dam.
Acre-foot	A unit of volumetric measure that would cover 1 acre to a depth of 1 foot. One acre-foot is equal to 43,560 cubic feet or 325,850 gallons.
Berm	A nearly horizontal step (bench) in the upstream or downstream sloping face of the dam.
Boil	A disruption of the soil surface due to water discharging from below the surface. Eroded soil may be deposited in the form of a ring (miniature volcano) around the disruption.
Breach	An opening through the dam that allows draining of the reservoir. A controlled breach is an intentionally constructed opening. An uncontrolled breach is an unintended failure of the dam.
Conduit	A closed channel (round pipe or rectangular box) that conveys water through, around, or under the dam.
Control section	A usually level segment in the profile of an open channel spillway above which water in the reservoir discharges through the spillway.
Cross section	A slice through the dam showing elevation vertically and direction of natural water flow horizontally from left to right. Also, a slice through a spillway showing elevation vertically and left and right sides of the spillway looking downstream.
Dam	An artificial barrier generally constructed across a watercourse for the purpose of impounding or diverting water.
Dam failure	The uncontrolled release of a dam's impounded water.
Dam Operator	The person(s) or unit(s) of government with responsibility for the operation and maintenance of dam.
Drain, toe or foundation, or blanket	A water collection system of sand and gravel and typically pipes along the downstream portion of the dam to collect seepage and convey it to a safe outlet.
Drainage area (watershed)	The geographic area on which rainfall flows into the dam.
Drawdown	The lowering or releasing of the water level in a reservoir over time or the volume lowered or released over a particular period of time.
Emergency	A condition that develops unexpectedly, endangers the structural integrity of the dam and/or downstream human life and property, and requires immediate action.
Emergency Action Plan (EAP)	A formal document identifying potential emergency conditions that may occur at the dam and specifying preplanned actions to minimize potential failure of the dam or minimize failure consequences including loss of life, property damage, and environmental impacts.

Evacuation map	A map showing the geographic area downstream of a dam that should be evacuated if it is threatened to be flooded by a breach of the dam or other large discharge.
Filter	The layers of sand and gravel in a drain that allow seepage through an embankment to discharge into the drain without eroding the embankment soil.
Freeboard	Vertical distance between a stated water level in the reservoir and the top of dam.
Gate, slide or sluice, or regulating	An operable, watertight valve to manage the discharge of water from the dam.
Groin	The area along the intersection of the face of a dam and the abutment.
Hazard classification	A system that categorizes dams (high, significant, or low) according to the degree of their potential to create adverse incremental consequences such as loss of life, property damage, or environmental impacts of a failure or misoperation of a dam.
Height, dam	The vertical distance between the lowest point along the top of the dam and the lowest point at the downstream toe, which usually occurs in the bed of the outlet channel.
Hydrograph, inflow or outflow, or breach	A graphical representation of either the flow rate or flow depth at a specific point above or below the dam over time for a specific flood occurrence.
Incident Commander	The highest predetermined official available at the scene of an emergency situation.
Instrumentation	An arrangement of devices installed into or near dams that provide measurements to evaluate the structural behavior and other performance parameters of the dam and appurtenant structures.
Inundation area or map	The geographic area downstream of the dam that would be flooded by a breach of the dam or other large discharge.
Notification	To immediately inform appropriate individuals, organizations, or agencies about a potentially emergency situation so they can initiate appropriate actions.
Outlet works (principal spillway)	An appurtenant structure that provides for controlled passage of normal water flows through the dam.
Piping	The progressive destruction of an embankment or embankment foundation by internal erosion of the soil by seepage flows.
Probable Maximum Precipitation (PMP) or Flood (PMF)	The theoretically greatest precipitation or resulting flood that is meteorologically feasible for a given duration over a specific drainage area at a particular geographical location.
Reservoir	The body of water impounded or potentially impounded by the dam.
Riprap	A layer of large rock, precast blocks, bags of cement, or other suitable material, generally placed on an embankment or along a watercourse as protection against wave action, erosion, or scour.
Risk	A measure of the likelihood and severity of an adverse consequence.

Seepage	The natural movement of water through the embankment, foundation, or abutments of the dam.
Slide	The movement of a mass of earth down a slope on the embankment or abutment of the dam.
Spillway (auxiliary or emergency)	The appurtenant structure that provides the controlled conveyance of excess water through, over, or around the dam.
Spillway capacity	The maximum discharge the spillway can safely convey with the reservoir at the maximum design elevation.
Spillway crest	The lowest level at which reservoir water can flow into the spillway.
Tailwater	The body of water immediately downstream of the embankment at a specific point in time.
Toe of dam	The junction of the upstream or downstream face of an embankment with the ground surface.
Top of dam (crest of dam)	The elevation of the uppermost surface of an embankment which can safely impound water behind the dam.

Appendix B–1
Location and Vicinity Maps





B-2A
Structures Within Inundation Zone
City Limits
Approximate Flood Extent (50% PMF, Dam Breach)
West Dam Project Area
West Dam Project Area
Normal Pool Elevation
Above Normal Pool Elevation
US Hwy 385
US Hwy 16
1,000
500
0
1,000 Feet
BANNER
Engineering | Architecture | Surveying
www.bannerassociates.com
Custer
West Dam

Inundated Structures
City Limits
Approximate Flood Extent (50% PMF, Dam Breach)
US Hwy 16 Alt
US Hwy 16 (Alt) Scn
End Of Study Area
US Hwy 385
US Hwy 16
1,000
500
0
1,000 Feet
BANNER
Engineering | Architecture | Surveying
www.bannerassociates.com

Appendix B–3
Residents/Businesses/Highways at Risk

A major flood which could cause a sudden breach of the dam is estimated to inundate a number of homes and businesses. These are (marked on the evacuation map). The dam is located approximately 1.3 miles west of downtown Custer on Highway 16. Highway(s) 385 North and South Intersect the Floodway area between the Dam and the downtown Custer Area.

Single Family Residences	Address	Phone No.	Map Label
Eagle, Edward W & Rebecca	676 W MT RUSHMORE RD, CUSTER, SD	605-840-8410	H1
WILLIAM & PATRICIA SPARGUR	10 O'CONNOR RD, CUSTER, SD	605-673-4395	H2
MICHAEL & JEAN TRELOAR	1040 GORDON ST, CUSTER, SD	605-673-2034	H7
Bradeen, Ronald	1158 GORDON ST, CUSTER, SD	605-673-2629	H8
Bradeen, Ronald	1154 GORDON ST, CUSTER, SD	605-673-2629	H9
Stumpf, Richard & Patricia	432 LOT 1 WASHINGTON ST, CUSTER, SD	605-673-2127	H10
Stumpf, Richard & Patricia	432 WASHINGTON ST, CUSTER, SD	605-673-2127	H11
DOREEN SHEPARD	1135 WASHINGTON ST, CUSTER, SD	605-673-4138	H12
PAUL & CAROL NIEMANN	112 S 7TH ST, CUSTER, SD	605-673-3008	H13
KENNETH TRELOAR	36 CENTENNIAL DR, CUSTER, SD	605-673-4360	H16
Hooper, Jr Otha Floyd aka Buster	1308 CANAL ST, CUSTER, SD	605-673-2107	H17
TIMOTHY & TAMMY WICKS	1304 CANAL ST, CUSTER, SD	605-673-5180	H18
Scherer, Nathaniel & Janae	1212 CANAL ST, CUSTER, SD	605-440-0134	H19
LAMONTE & ANN MORROW	25148 WAZI LN, CUSTER, SD	605-673-5154	H22
Nelson, Linda	119 S 8TH ST, CUSTER, SD	605-673-2921	H23
JOE & FEROL MCCLAREN	121 S 8TH ST, CUSTER, SD	605-673-4889	H24
HARVEY & MAE LANCASTER	120 S 8TH ST, CUSTER, SD	605-673-2480	H25
JAMES & WILMA RHOADES	110 S 8TH ST, CUSTER, SD	605-673-4596	H26
ALBERT & WANDA MORGAN	107 S 10TH ST, CUSTER, SD	605-673-5035	H27
WILLIAM & SHERI DELANEY	1025 GORDON ST, CUSTER, SD	605-673-2896	H29
WILLIAM & SHERI DELANEY	1033 GORDON ST., CUSTER, SD	605-673-2896	
Bradeen, Ronald	1152 GORDON ST, CUSTER, SD	605-673-2629	H30
Bradeen, Ronald	1164 GORDON ST, CUSTER, SD	605-673-2629	H31
Bradeen, Ronald	1176 GORDON ST, CUSTER, SD	605-673-2629	H32
SHARON & STEVEN BRIGGLE	1211 CANAL ST, CUSTER, SD	605-673-2121	H33
Reifschneider, Kimberly	1219 CANAL ST, CUSTER, SD	605-673-5259	H34
Pizza Mill	904 MT RUSHMORE RD, CUSTER, SD	605-673-3306	H36
Yehle, Frank & Kathie	7 MT RUSHMORE RD, CUSTER, SD	949-412-6633	H37
Yehle, Frank & Kathie	11 MT RUSHMORE RD, CUSTER, SD	949-412-6633	V4
Koester, Kathi	21 MT RUSHMORE RD, CUSTER, SD	605-673-3590	H38
Johnson, Eric & Sarah	1221 CANAL ST, CUSTER, SD	630-220-8874	H39
WILLARD ROBERTS	1320 CANAL ST, CUSTER, SD	605-673-3227	H40
Holtquist, Daniel	1312 CANAL ST, CUSTER, SD	605-673-2507	H41
Swanson, Brandi	1208 CANAL ST, CUSTER, SD	605-484-8445	H42
DAVID & VICTORIA DAVIS	910 MT RUSHMORE RD, CUSTER, SD	605-673-5355	H45

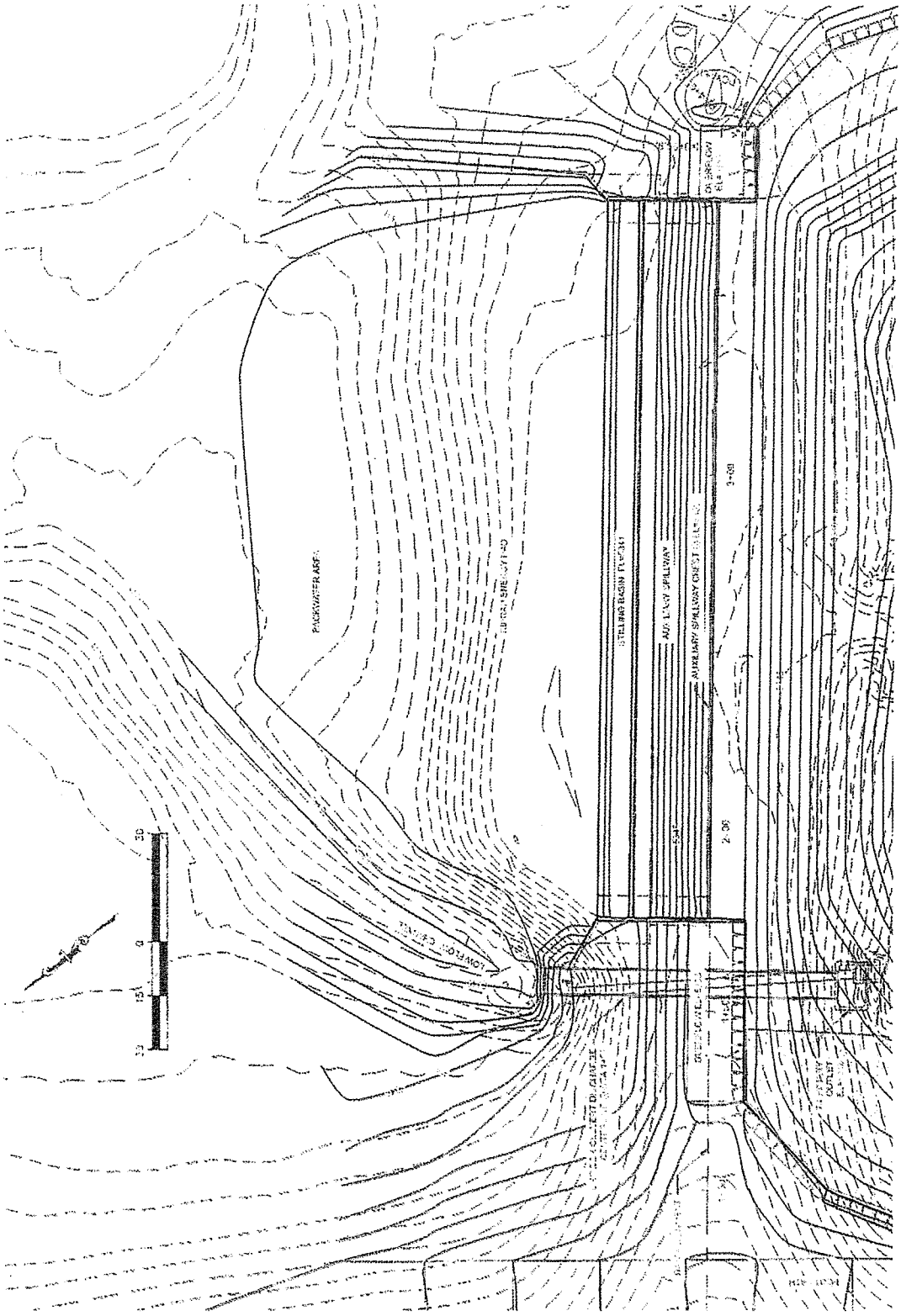
Waite, Blair	105 S 8TH ST, CUSTER, SD	605-673-3828	H46
Eisenbraun, Marcia	1047 GORDON ST, CUSTER, SD	605-787-3542	H47
MARCIA EISENBRAUN	1037 GORDON ST, CUSTER, SD	605-787-3542	V2
Bradeen, Ronald	1168 GORDON ST, CUSTER, SD	605-673-2369	H48
LISA BRYANT	1215 CANAL ST, CUSTER, SD	605-673-4506	H49
CHARLES & SANDRA ARSENAULT	918 MT RUSHMORE RD, CUSTER, SD	605-673-3836	H54
WILFRED & LINDA FROST	109 GORDON ST, CUSTER,SD	605-673-4110	H55
BANK OF AMERICA	131 GORDON ST, CUSTER, SD	800-669-6607	H56
LeClair, Thomas	105 S 11th St, CUSTER, SD		M11
Multi Family/ Hotel-Motel	**Address**	**Phone No.**	**Map Label**
WESTERN STAR MOTEL	905 MT RUSHMORE RD, CUSTER, SD	605-673-5538	M2
ECONOLODGE	342 Mt. Rushmore Rd., CUSTER, SD	605-673-4400	M7
CAROL FRASIER	721 ½ MT RUSHMORE RD, CUSTER, SD	605-673-2667	M8
Morrissey, Mark	107 APT 1 S 11TH ST, CUSTER, SD	605-673-4405	M12
Morrissey, Mark	107 APT 2 S 11TH ST, CUSTER, SD	605-673-4405	M13
CHIEF MOTEL	120 MT RUSHMORE RD, CUSTER, SD	605-673-2318	M14
ROCK CREST LODGE & CABINS	15 W MT RUSHMORE RD, CUSTER, SD	605-673-4323	M15
LEROY HOTEL BED & BREAKFAST	703 APT 1 MT RUSHMORE RD, CUSTER, SD	605-673-2802	M16
Gibeau, Dawn R	66-1 O'CONNOR RD, CUSTER, SD		M18
HOLIDAY INN	433 W MT RUSHMORE RD, CUSTER, SD	605-673-2500	M19
CHARLES & DARLENE BERGERON	28 O'CONNOR RD, CUSTER, SD	605-673-4057	M21
Brenda Stange	40 APT 1 MT RUSHMORE RD, CUSTER, SD	605-440-0567	M31
Terry Bruce	40 APT 2 MT RUSHMORE RD, CUSTER, SD	605-673-3106	M32
Nick Eyrich	40 APT 3 MT RUSHMORE RD, CUSTER, SD	605-440-0180	M33
Scott Engstrom	40 APT 4 MT RUSHMORE RD, CUSTER, SD	605-517-1137	M34
Jamie Dean	40 APT 5 MT RUSHMORE RD, CUSTER, SD	605-517-2436	M35
Phillip Abernathy	40 APT 6 MT RUSHMORE RD, CUSTER, SD	605-441-1466	M36
Commerical Building	**Address**	**Phone No.**	**Map Label**
STAGE STOP TRADING POST	640 W MT RUSHMORE RD, CUSTER, SD	605-673-4434	C1
SUNSHINE STORAGE	30 S 5TH ST, CUSTER, SD		C2
S & B MOTOR PARTS	700 MT RUSHMORE RD, CUSTER, SD	605-673-2139	C3
WESTERN REAL ESTATE	731 MT RUSHMORE RD, CUSTER, SD	605-673-4345	C4
VFW POST 3442	721 MT RUSHMORE RD, CUSTER, SD	605-673-4262	C5
CUSTER TRUE VALUE	833 MT RUSHMORE RD, CUSTER, SD	605-673-2227	C6
STARR INSURANCE INC	38 MT RUSHMORE RD, CUSTER, SD	605-673-3799	C8
COMMON CENTS	24 W MT RUSHMORE RD, CUSTER, SD	605-673-4491	C9
STATE FARM INSURANCE	8 W MT RUSHMORE RD, CUSTER, SD	605-673-4141	C11
WALK IN WOOD STORAGE	32 S 3RD ST, CUSTER, SD	605-673-5970	C12
FRENCH CREEK RV PARK	144 S 4TH ST, CUSTER, SD	605-673-3161	C13
CITY OF CUSTER CITY	31 S 3RD ST, CUSTER, SD	605-673-4824	C15
BIG D OIL COMPANY	133 W MT RUSHMORE RD, CUSTER, SD	605-673-3335	C16

CUSTER CORRAL	47 S 2ND ST, CUSTER, SD	605-673-5900	C20
DAKOTA COWBOY RESTAURANT	216 W MT RUSHMORE RD, CUSTER, SD	602-673-4613	C21
MISTY'S CUTS & CURLS	331 MT RUSHMORE RD, CUSTER, SD	605-673-5299	C24
LYNN'S DAKOTAMART	300 MT RUSHMORE RD, CUSTER, SD	605-673-4463	C26
FIRST INTERSTATE BANK	648 MT RUSHMORE RD, CUSTER, SD	605-673-2215	C28
CUSTER AREA CHAMBER OF COMMERCE	615 WASHINGTON ST, CUSTER, SD	605-673-2244	C29
FREEMAN'S ELECTRIC SERVICE	748 MT RUSHMORE RD, CUSTER, SD	605-342-4099	C30
CLAW, ANTLER & HIDE COMPANY	735 MT RUSHMORE RD, CUSTER, SD	605-673-4345	C31
PURPLE PIE PLACE	19 MT RUSHMORE RD, CUSTER, SD	605-673-4070	C32
R & W CAR CARE	104 W MT RUSHMORE RD, CUSTER, SD	605-673-4008	C33
BLACK HILLS POWER	41 s 3RD St. ST, CUSTER, SD	605-673-4455	C34
MISS MARGIE'S	722 MT RUSHMORE RD, CUSTER, SD	605-673-5263	C35
OUR PLACE	738 MT RUSHMORE RD, CUSTER, SD	605-673-5255	C36
CUSTER INDUSTRIAL	747 MT RUSHMORE RD, CUSTER, SD	605-673-5673	C37
Nuckles, Leslie & Janet	819 MT RUSHMORE RD, CUSTER, SD	605-440-0382	C40
CUSTER CAR WASH	932 MT RUSHMORE RD, CUSTER, SD	605-673-1707	C42
KELLEY & KELLEY CONTR	1115 WASHINGTON ST, CUSTER, SD	605-673-7973	C43
CITY OF CUSTER CITY – Water Plant	1105 WASHINGTON ST, CUSTER, SD	605-673-4824	C44
CITY OF CUSTER CITY – Harbach Park	110 S 6TH ST, CUSTER, SD	605-673-4824	C46
SANDER SANITATION SERVICE	1155 WASHINGTON ST, CUSTER, SD	605-673-4300	C47
Sontos, LLC	39 S 4TH ST, CUSTER, SD	605-673-2350	C48
WITTS HEATING & AIR	104 S 9TH ST, CUSTER, SD	605-673-3212	C49
Tennyson Investments, LLC	35 S 4TH ST, CUSTER, SD	605-673-2350	C50
BLACK HILLS ENERGY	110 S 2ND ST, CUSTER, SD	605-673-4455	C51
BRADEEN REAL ESTATE CENTER	14 W MT RUSHMORE RD, CUSTER, SD	605-673-2629	C53
SENTINEL FEDERAL CREDIT UNION	18 MT RUSHMORE RD, CUSTER, SD	605-673-4416	C54
Nelson's Oil and Gas	821 STE 3 MT RUSHMORE RD, CUSTER, SD	605-673-4371	C55
Custer Hardware Inc	111 S 4TH ST, CUSTER, SD	605-673-2227	C57
GRIZZLY GULCH MINIATURE GOLF	231 W Mt Rushmore Road	605-673-5921	C60
SUBWAY	926 MT RUSHMORE RD, CUSTER, SD	605-673-2722	C61
ART EXPRESSIONS	36 S 6TH ST, CUSTER, SD	605-673-3467	C62
Hart, Donald & Jill	26 S 6TH ST, CUSTER, SD	605-673-5504	C63
TRI-STATE TRAILERS	588 W MT RUSHMORE RD, CUSTER, SD	605-673-3734	C64
Dacotah Banks, Inc	35 S 6TH ST, CUSTER, SD	605-673-5800	V7
Vacant Building	**Address**	**Phone**	**Map Label**
Nelson, Linda	119 S 8TH ST, CUSTER, SD	605-673-2921	V3
Yehle, Frank & Kathie	5 MT RUSHMORE RD, CUSTER, SD	949-412-6633	V5
Sodak Oz, LLC	302 WASHINGTON ST, CUSTER, SD	605-673-4455	V6
CITY OF CUSTER CITY	149 W MT RUSHMORE RD, CUSTER, SD	605-673-4824	C17
CUSTER MUNICIPAL	103 W MT RUSHMORE RD, CUSTER, SD	605-673-4824	C27
CUSTER MUNICIPAL	134 S 6TH ST, CUSTER, SD	605-673-4824	C45

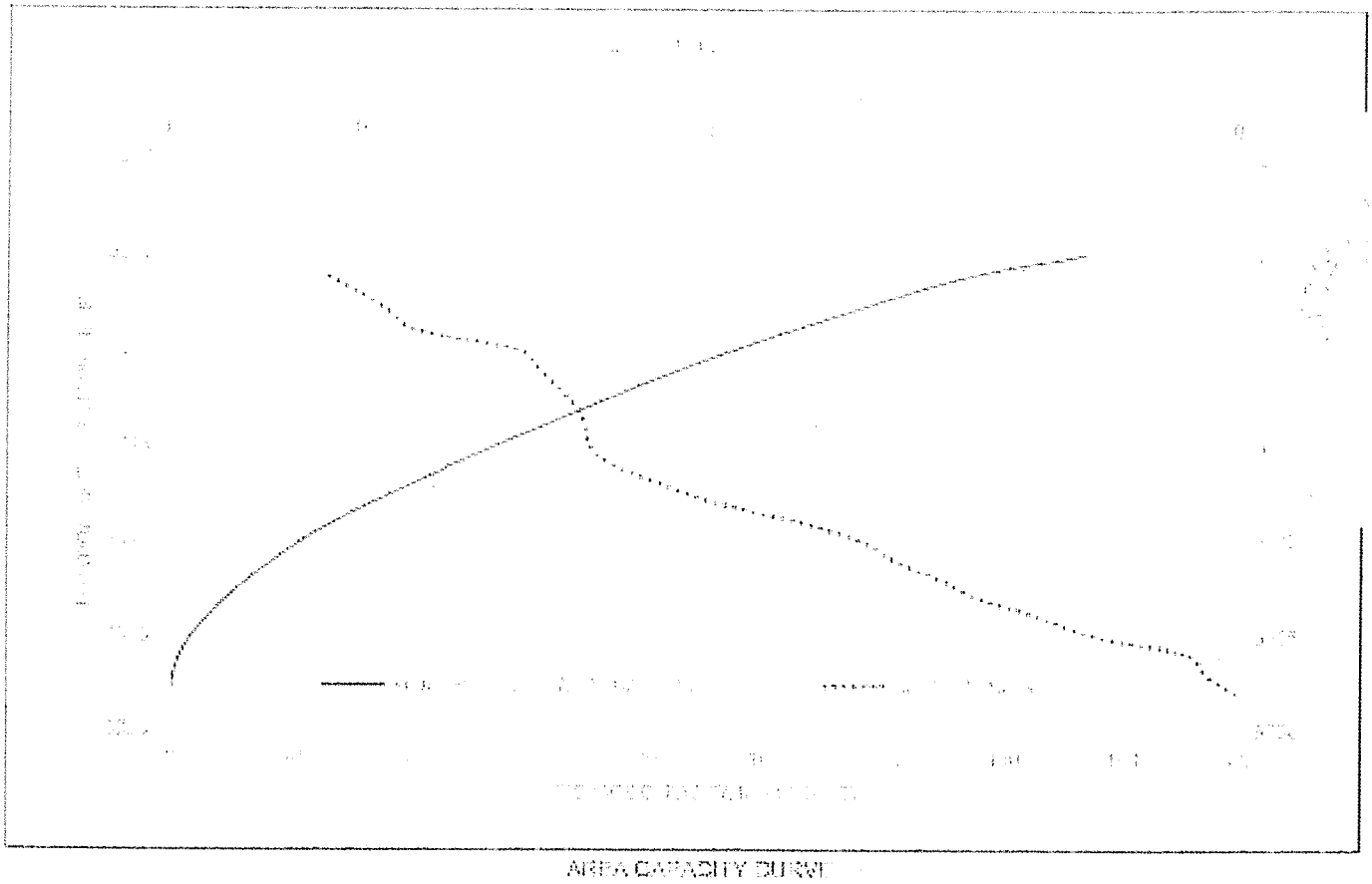
* See *Evacuation Maps* (Appendix B–2a and Appendix B-2b).

Breach inundation study completed by Banner Associates, Inc. (May, 2016)

Appendix B–4
Plan View of Dam



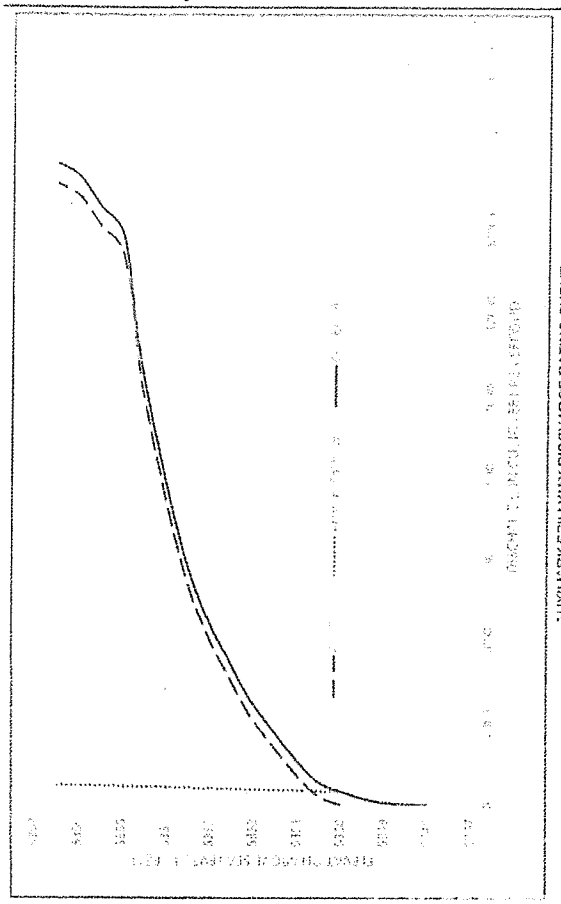
Appendix B–5
Reservoir Capacity Graph



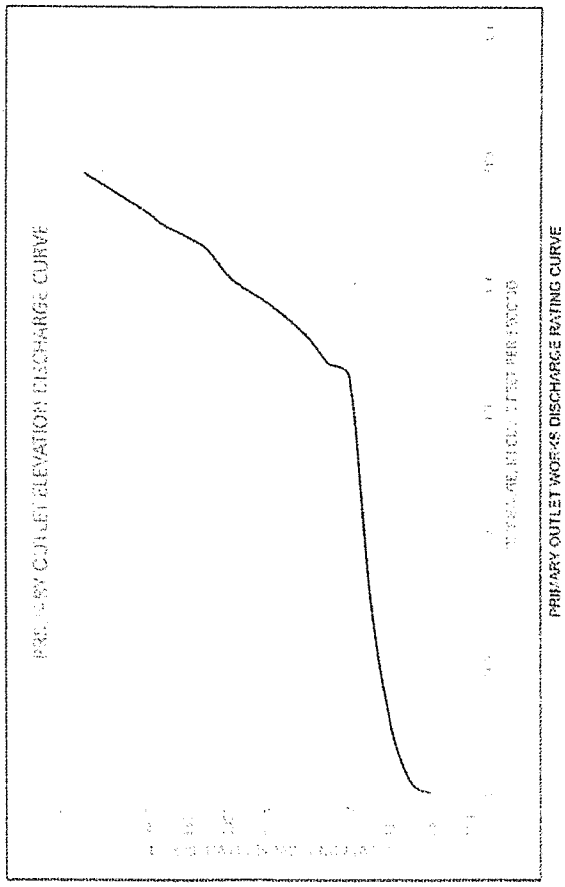
Information from Agency Review Plans dated March 2016

Appendix B–6 Spillway Discharge

Next Page



AUXILIARY SPILLWAY DISCHARGE RATING CURVE



PRIMARY OUTLET WORKS DISCHARGE RATING CURVE

Appendix B–7
National Inventory of Dams (NID) Data

Dam Name: Custer West Dam

State: South Dakota

NID ID: SD02616

Longitude: -103.6214

Latitude: 43.7596

Geodetic Location: NE ¼ SE ¼ Section 27 Township 3S Range 4E of the Black Hill Meridian

County: Custer

Stream: Little French Creek

Nearest Town: Custer, SD

Distance to Nearest Town: 1.1 mi

Year Constructed:

Original: 1940's

Proposed Reconstruction: 2018

Max. Discharge: 4200 ft^3/s

Max. Storage: 123 acre-ft

Normal Storage: 77.5 acre-ft

Surface Area: 7.3 acres

Drainage Area: 36 mi^2

Owner: City of Custer, SD

Dam Height: 13 ft

Dam Length: 300 ft

Dam Volume: 20,000 yd^3

Current Hazard Potential: High

Principal Spillway Type: Precast Concrete (Morning Glory Type – Overflow Wier)

Principal Spillway Conduit Diameter: 8 x5 ft. box culvert

Auxiliary Spillway Type: Reimforced Concrete (Ogee Crest)

Auxiliary Spillway Width: 200 ft

DEER SURVEY WORKSHEET

	DATE	TIME	DOES	FAWN	BUCKS	Total
	10/14/2015	06:40-07:30				
Northwest			5	2	1	8
Soutwest			0	0	0	0
Southeast			16	3	3	22
Northeast			14	12	3	29
Total			35	17	7	59
	10/14/2015	17:40-18:35				
Northwest			6	6	0	12
Soutwest			4	3	1	8
Southeast			23	16	6	45
Northeast			29	15	6	50
Total			62	40	13	115
	10/21/2016	07:05-07:55				
Northwest			10	4	2	16
Soutwest			17	10	2	29
Southeast			20	6	1	27
Northeast			15	10	0	25
Total			62	30	5	97
	10/27/2016	16:50-17:40				
Northwest			5	5	2	12
Soutwest			11	7	0	18
Southeast			23	18	5	46
Northeast			17	17	4	38
Total			56	47	11	114